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THE OPPORTUNITY BOOKS

Opportunities in Farming

By

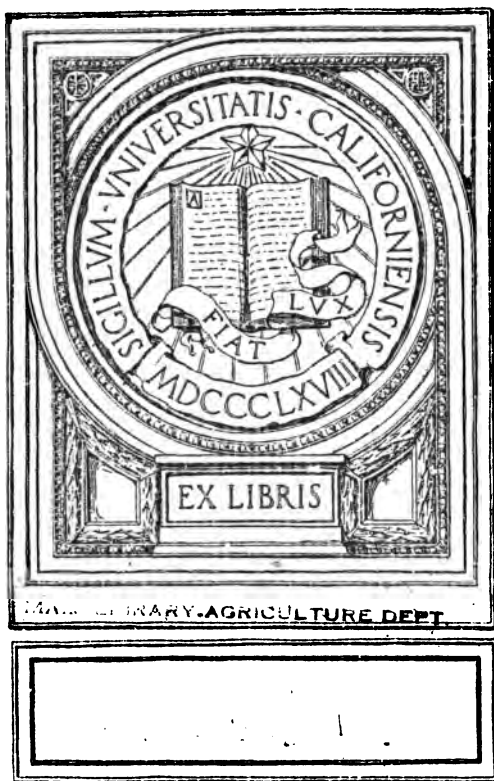
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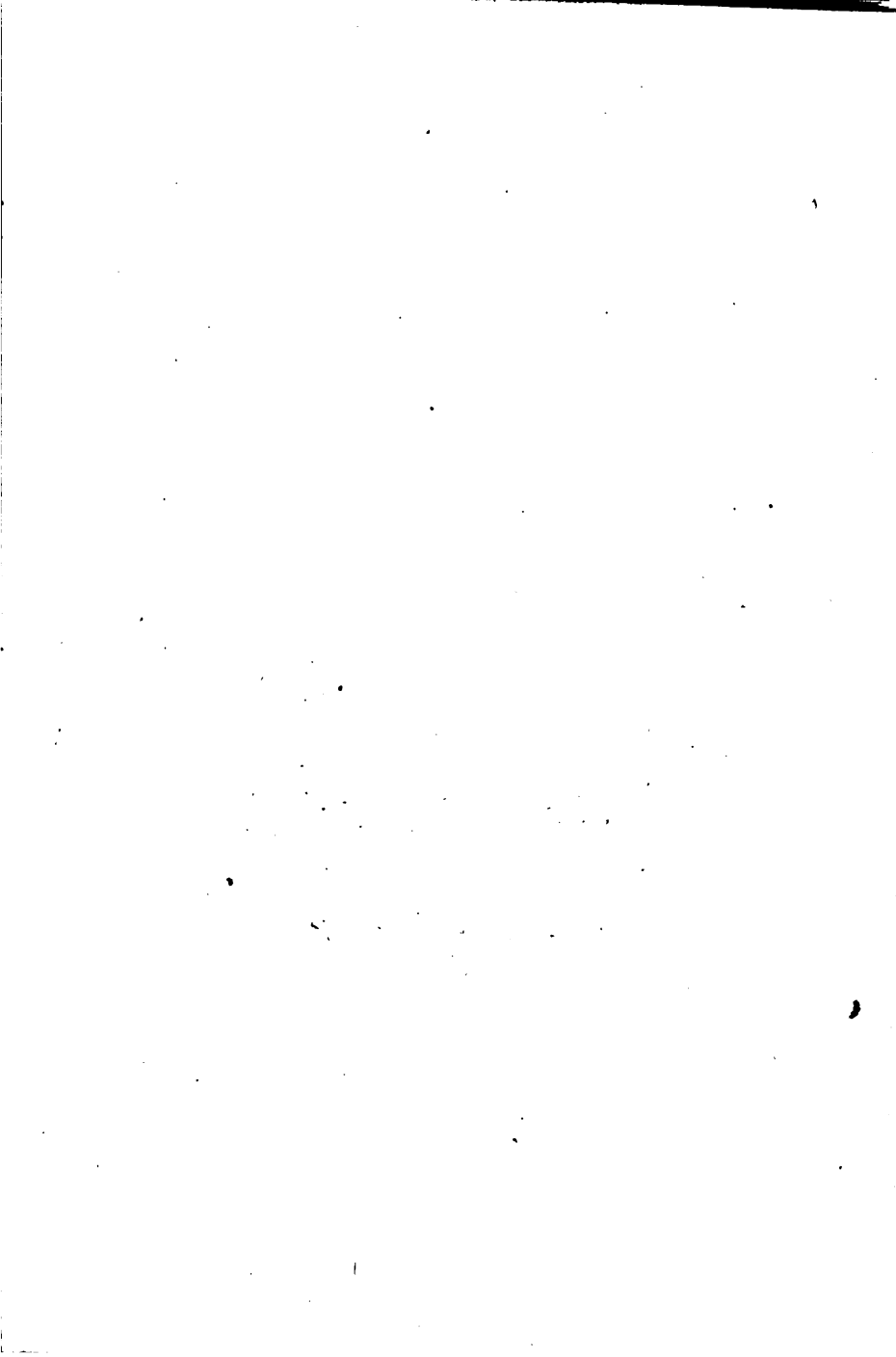


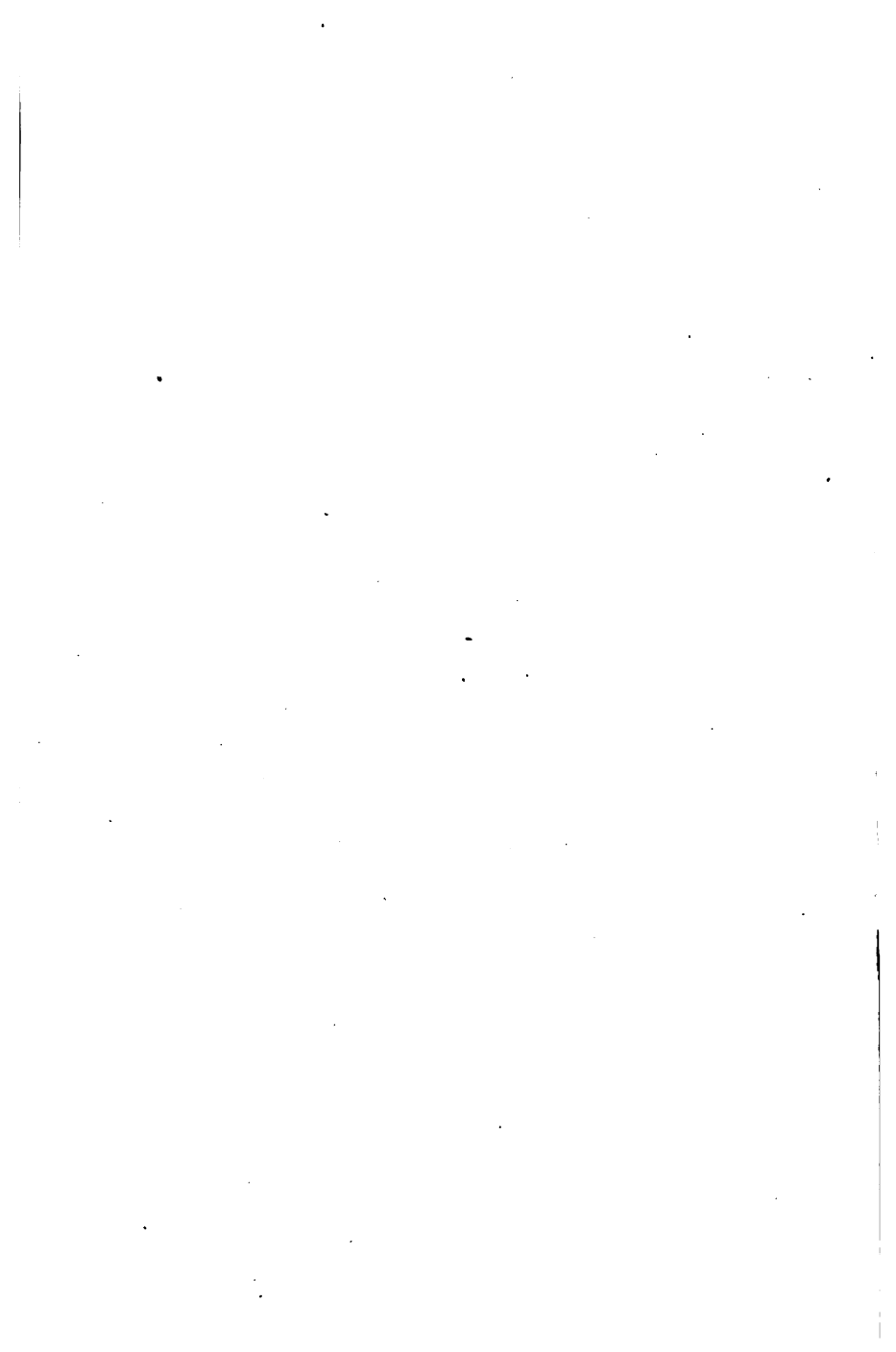
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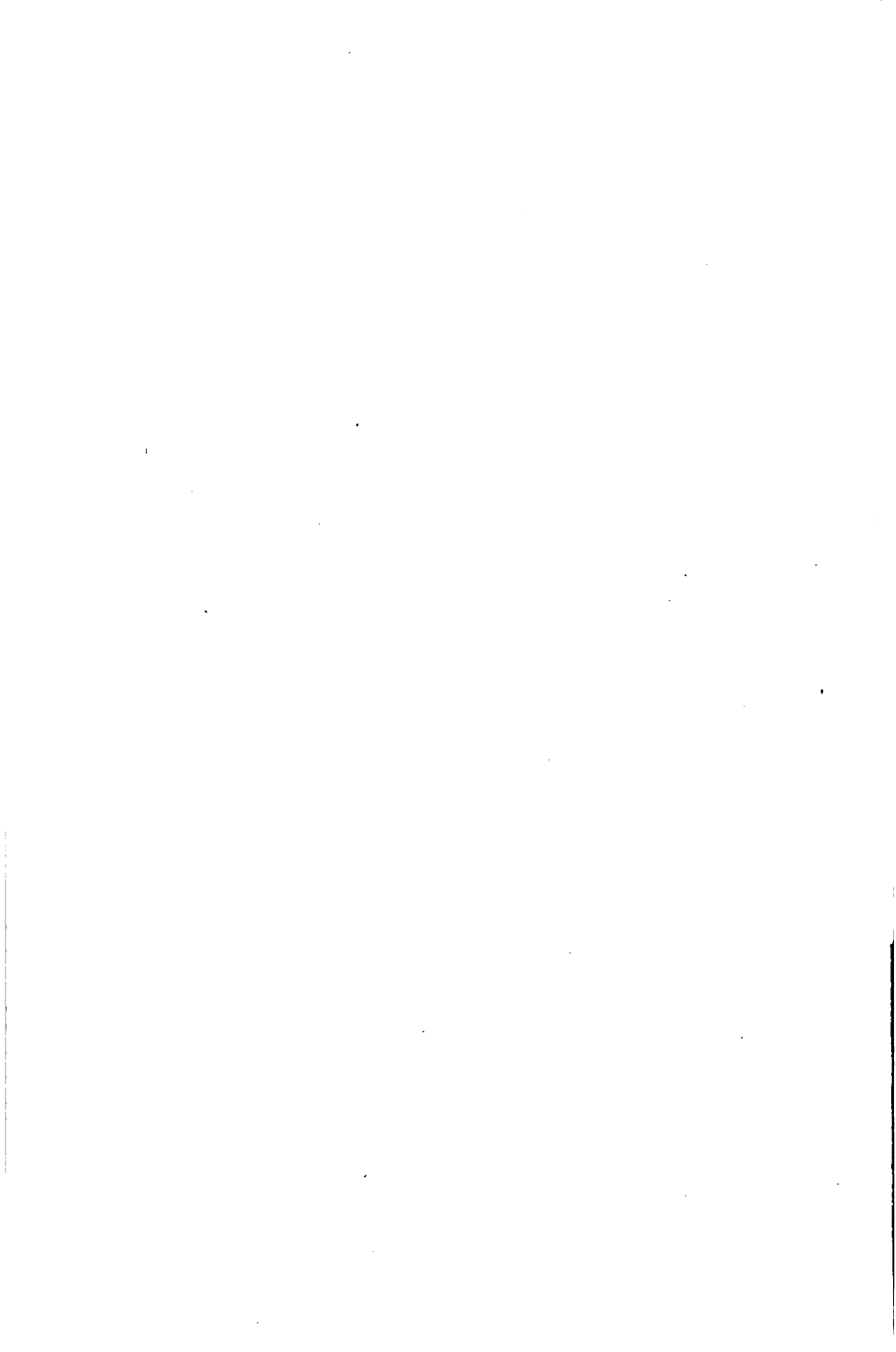




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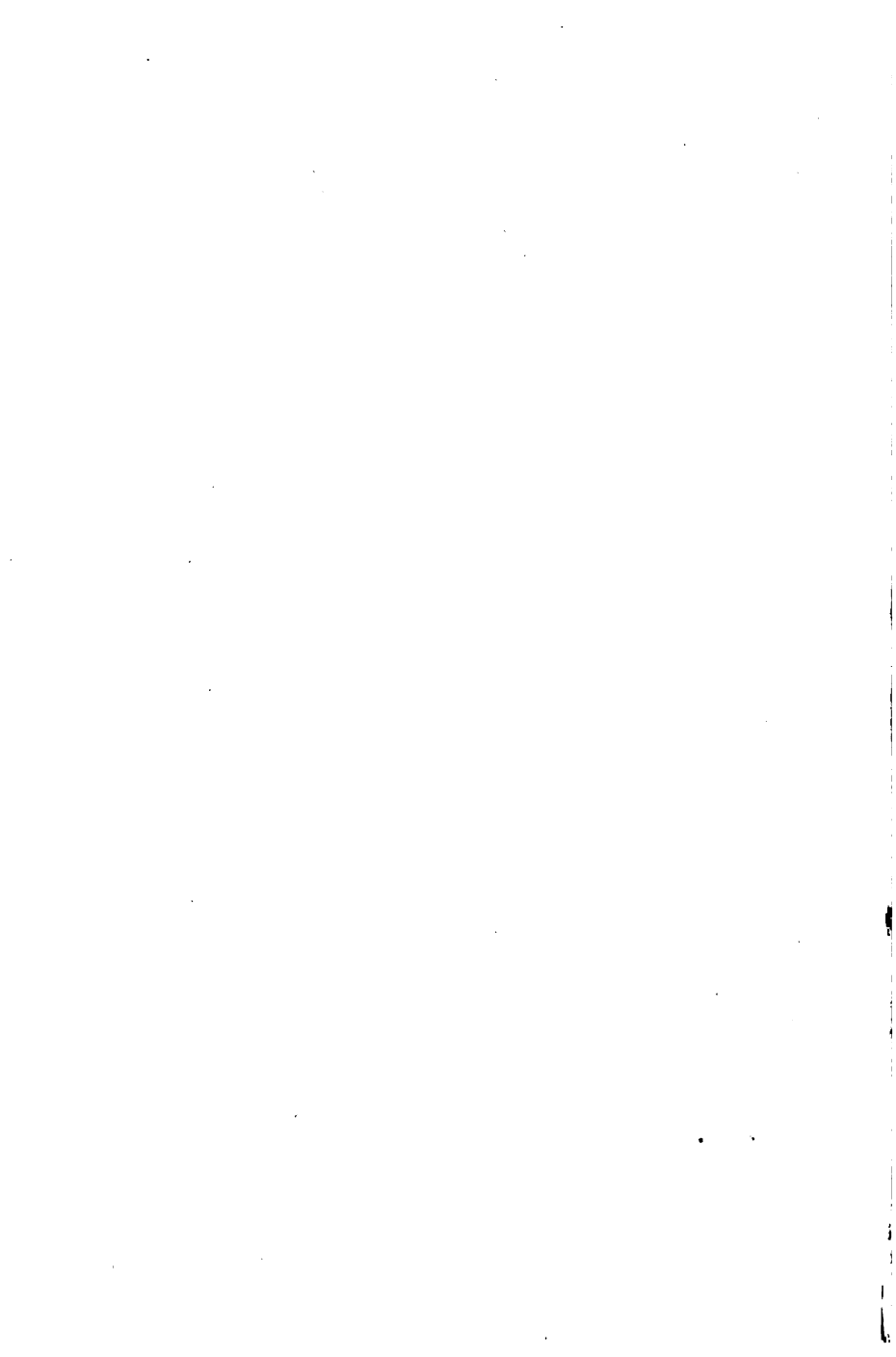






OPPORTUNITIES IN FARMING







TO THE AGRICULTURE



**IN HARVESTING, THE LABOR-SAVING REAPING-MACHINE HAS PROVED A GREAT CONSERVER OF
TIME AND ENERGY**

OPPORTUNITIES IN FARMING

By EDWARD OWEN DEAN



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TO THE
AGRICULTURE

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OPPORTUNITIES IN FARMING

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I

WHY I AM A FARMER

“YOU have been on the farm a good many years—what is the attraction, anyway; what holds you?” Many times this question has been put to me. Well, the answer may be summed up in three words—home, independence, health.

There is much misplaced sympathy for the “poor isolated farmer,” deprived from intercourse with his fellows, as some well-meaning but mistaken persons would have us believe. Why, friends, a farm is never lonesome to one who loves the work. It is teeming with life and activity every minute in the day, and in this period of automobiles, good roads, and telephones there is not a rural community in the United States that is a hundredth part

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as lonely as the biggest city on the globe, where two families may live for years in adjoining apartments and never become intimately enough acquainted with each other to say "Good morning" or "Good evening" if any of them should happen to meet in the hall or on the stairs or in the elevator.

There is no home like the farm home. And with the incomparable charm of rural home life comes the infinite pleasure of creative effort and the exhilaration of contending with nature and winning bread from the bare ground. There are a constancy and a stability about it all. There is something to build on, something to look forward to in the years to come. Then, again, there is a feeling of independence that only a chosen few in the city enjoy, and a freedom from those uncertainties and cares that are a part and parcel of the industrial wage-earner's existence.

Is not the good health that farm life assures worth something, too? Isn't it something to realize not only that you are bringing up your children to be vigorous in body, but that their daily associations and the discipline that grows out of the work they perform are building character, self-reliance, and the will to overcome obstacles? A city boy is

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handicapped for the lack of these early opportunities. It is no mystery why most of the big men in the cities are country-bred.

Here in the country a man is "somebody" in the neighborhood. You know every one and every one knows you. When you are in distress the neighbors come from miles around to aid and comfort you. Some of the sweetest memories of my life are of the time our friends rallied to our side when sorrow hovered over our household.

When the haying is over and the rush eases up a bit we have our picnics and farm institutes, and during the off-season in the winter months we have many opportunities for social and intellectual pastimes. Our granges are doing a wonderful work among the rural population. Both men and women are admitted to membership. They are not only bringing about marked improvements in agriculture and promoting the material interests of the farmers, but are drawing our people into closer personal relationship. We have our amateur theatricals, our literary clubs, our barn dances, card parties, county fairs, meetings for the discussion of agricultural topics—to enumerate them all would fill pages of this volume.

Some people in the cities have an idea that

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farm work is not an "elevating" occupation, but I want to say to you, my friends, with all the earnestness of which I am capable, that agriculture is one of the most dignified employments in which a man can engage. Some of our Presidents and many of our Governors of states, on retiring from their public offices, have taken up farming, and their laurels did not fade thereby. Do you think it would have been any more commensurate with their dignity if they had opened a dry-goods store or gone into the wholesale butter-and-egg business? One of these men who turned to farming when he quit the executive mansion was the late ex-Governor Hoard of Wisconsin. He did more for dairying by his progressive methods than any other man of this generation, and every dairy-farmer in the nation is, or should be, under lasting obligations to him.

It is true that the farmer's returns are comparatively moderate, but they can be counted upon with a greater degree of certainty than the average business. It may be true that he has no huge financial prizes to scramble for or gamble for. His is a slow and sure enterprise, promising an honest livelihood this year, competence by and by, and independence in the evening of life.

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And all the while he had been free from the trampling, crushing, and elbowing that must be endured by millions cooped up in the cities, "mere unrecognized cogs in a huge industrial machine."

Of course, we have to work for a living, and we have our setbacks, our discouragements, and our problems, but we are forging ahead and there are brighter days in store. On every hand are evidences that a new era in American agriculture is dawning. And as we make progress in our own well-being we shall be doubly rewarded by the knowledge that at the same time we are contributing to the sum total of national prosperity and the advancement to higher and nobler things on the part of the people as a whole. For, be it known, the farms are not only producing better crops and better live stock, but we are producing better farmers, and better farmers mean a more intelligent and useful class of citizens. As our schools continue to improve and as we extend our educational facilities so that our boys and girls may enjoy all the advantages that should be rightly theirs, the farming communities will make a still stronger appeal to the home-makers and more of our farm children will be content to remain on the

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land when the time comes for them to choose definitely their life vocation.

I have thus recounted briefly why agriculture has appealed to me. I may add that the best and happiest years of my life have been those spent on the farm. We need more men and women out here in the great open country who love the farm for the farm's sake, and to one who has the soul to respond there is no occupation in the wide world that offers a finer satisfaction than that which comes from wresting out of the earth the products which underlie all civilization and progress. I would deem it a rare privilege if I could be of some small service to those thousands who, eking out an existence in the crowded centers of population, may be planning new careers as tillers of the soil. I know there are many potential farmers in the cities. The great problem is how to get a proper start. In the pages to follow I shall try to indicate the opportunities that agriculture offers to the city dwellers and point out the methods by which they may attain their worthy ambition. I would give an understanding of the demands of an agricultural life so as to help to a decision whether to remain in the city or seek to establish a home in the country. After all, it

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is a question that can be wisely determined only by each person himself, but it is possible to formulate a broad outline that may make the path of the beginner smoother and render more probable the success of his venture, and this is what I shall attempt to do.

As I write, the rain, driven by a howling nor'easter, beats against our sitting-room windows. A genial warmth radiates from the old box-stove. I have just come from the barn after the last round of the night to see that all is well with the live stock.

Their quarters are snug and comfortable. I tossed each of the animals a little hay and lingered a few minutes while they munched placidly. The wild night lent an added coziness within. On the way back I looked in at the pigs and saw the mother and her latest family of ten sleeping peacefully, half-buried in the bedding of straw. Passing along, I made sure that the doors of the fowl-houses were secure. Now I can revel in the simple luxuries of my own room, knowing that not a living being on the place is suffering from cold or hunger. Maybe our farm isn't much, after the manner of reckoning city fortunes, but it is our home and we love it.

II

FARM OPPORTUNITIES

THERE never has been a time in the history of this country when there was such a demand as at present for the products of the land. War or no war, mankind must be fed and clothed. With the loss of hundreds of thousands of food-producers in the belligerent nations, the vast work of reconstruction abroad and our own country's constant industrial growth, he is, indeed, a poor prophet who cannot foresee the tremendous opportunities facing the American farmer.

This is a condition to-day when countless thousands of acres of good tillable land lie idle and thousands of farm homes, vacant and abandoned, are rotting away, their former occupants long since dead or moved to distant cities. Our soil resources, huge as they already are, in great measure still are dormant, awaiting the touch of skilled and ener-

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getic hands. Never was there such a clarion call to the congested population, never the prospects better to leave behind the bustle and grind of the city for the tranquillity and wholesome living in God's great outdoors.

One would be surprised to learn how much land there is in the older states, such as Massachusetts and New York, for instance, that is unused, those who once tilled it having been attracted to industrial or other occupations. The close proximity of these lands to the great markets makes them particularly valuable from the farming point of view. Surely it cannot be that such opportunities will remain much longer neglected. The Commissioner of Agriculture of Massachusetts tells of land which, put under intensive cultivation, yielded more than one thousand dollars an acre, net. And there are many thousands of acres of such land in that state producing nothing. In New York, land by the tens of thousands of acres has been deserted and is advertised by the state—lands upon which will grow the finest quality of fruits, besides all the staple cereals and vegetables. It has been pointed out that within fifty miles of the city of Washington, in the states of Maryland and Virginia, there are large bodies of lands which

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once were parts of great plantations that can be had for less than any lands within equal distance of most of the larger cities of the West. The mind of the country has been turned toward the development of raw lands, the free, unbroken lands, to the neglect of opportunities nearer the center of the country's markets. In almost every Southern state instances can be cited where white men under the wise direction of the Department of Agriculture support their families and make an excellent living upon small farms of from ten to thirty acres. Yet between Washington and New Orleans there are over forty million acres of unused lands.

Realizing the vital importance of agricultural development to the well-being of the nation, the government is rapidly extending educational and financial aid to farmers, and the various states are constantly striving toward a betterment of marketing methods that will inure to the benefit of the producer, at the same time result in a saving for the consumer.

The Federal Reserve Act, which has benefited every citizen through its influence on banking throughout the Union, included provisions especially designed to assist the farming population. It authorized national banks

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to lend money on farm mortgages and recognized the peculiar needs of the farmer by giving his paper a maturity period of six months. This was followed by the Federal Farm Loan Act, which created a banking system reaching intimately into the rural districts and operating on terms suited to the farm-owners' requirements. In addition to this, Secretary Houston of the Department of Agriculture has a plan for a system of personal-credit unions especially for the benefit of individuals whose financial circumstances and scale of operations make it difficult for them to secure loans through ordinary channels.

Interest in land for homes and farms increases as the nation grows in population. It has become more marked as the area of public land suitable and available for agriculture has diminished. It is intensified at present by reason of the proposal of Secretary Lane of the Department of the Interior that returned soldiers, and others as well, who may wish to secure farms, shall have an opportunity to do so, and by the plans of various states to open up large areas for farm settlement. Mr. Lane has proposed three important projects: first, an irrigation scheme; second, a drainage project; and third, the develop-

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ment of a body of cut-over lands, in all about two hundred million acres. The first-mentioned undertaking, for instance, would need to have great dams constructed to impound and divert waters, a hydro-electric plant, miles of canal and tunnel, thousands of acres to be cleared and leveled, fenced and broken. This would mean years of work at good wages, work in the open under housing conditions that would seem palatial to the soldier of the trench, and at the end a piece of land on which would be erected a house and barn, a farm home in a group of farm-houses. For this he must pay. But already he has received wages out of which he can have saved the necessary first instalment of ten or fifteen per cent. The balance with interest he can pay in forty yearly instalments, or earlier if he desires. If life in Arizona, let us say, is not to his liking, he can have the same opportunity, after building the Arizona project, to take up a farm upon another government enterprise in South Carolina, where there have been drained the old rice-swamps, or in Wisconsin on a tract of what was once a swamp but has been transformed into rolling prairie farms.

Whether the government carries out this plan or puts some other scheme into opera-

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tion, it is certain that some important undertaking along this line is coming soon. It is certain, too, that a great many of our returning soldiers will never be content to resume sedentary occupations. The farms are beckoning. The opportunities are not knocking timidly. It is a loud and insisting thumping at the door.

Now, as to the chances a city man has to make a living in the country, I want to be perfectly frank. The great trouble heretofore has been the striking stories about wonderful farm crops that have appeared from time to time in books, magazines, Sunday papers, and real-estate literature. Many good city folk have been led to believe that all they have to do is get a little place in the rural precincts, scratch over the top of the ground, drop in the seed, and sit back in the shade while things grow. "Two Acres and a Living," "Six Hundred Bushels of Potatoes on an Acre of Land," "Five Acres and Prosperity." Fine reading, to be sure, but as a matter of fact there are very few farmers in this country who have made a living on two acres of land; there are very few farms that have produced six hundred bushels of potatoes to the acre, and there are very few men who have become prosper-

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ous on five acres. These things can be done in America, and are done, but they are unusual and the result of long experience and study. Editors are in the business for circulation. There is no circulation in commonplace affairs. That is why so many beginners in farming have been led to wrong conclusions and consequent disappointment and loss. Statements that Farmer Corntossel and his son rose at four o'clock in the morning, milked the cows, worked in the field all day, milked the cows again at night, and so made two dollars apiece, would not aid circulation any more than would the statement that Clerk Straphanger and his son hurried downtown in the morning, worked all day except a few minutes at the lunch-counter at noon, rushed back home at night for supper, and by so doing earned enough to pay their modest living expenses.

Understand, friends, that farming is a conservative business, and, like all conservative enterprises, it gives conservative returns. It offers a good living and a reasonable profit and, to one who loves the beauties of nature and the fresh air and sunshine, a joy that is boundless. Compared with city work, "farming is a better business than some farmers think it to be, and poorer than some city

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persons think it to be." A New York State official relates that at a farm-institute meeting the lecturer gave the profits of a certain dairy-farm for the previous year. After the meeting a prominent farmer, taking the lecturer one side, insisted that such a figure was too high, that it was entirely beyond credence. A city business man who also had heard the lecture joined them and declared that a farm that couldn't show any bigger earnings on investment than that ought to close up shop and quit. Of course this man could only see the dollar in a business. He couldn't understand the pleasure a real lover of the farm gets out of his work, the feeling of independence, the home comforts and luxuries that are denied millions of city-dwellers. Every man wants to be able to give his children a good start in life, and he looks to a competence in his old age, but the average farmer foregoes the prospects of great wealth in order that he may enjoy the things that money could not buy in a city. "I will admit," says "Congressman Pilkins," "that it costs more to live than it used to, but, fellow-citizens, it's worth it."

III

WHERE TO GO—WHAT STATE

THIS continent of ours is so vast, with such an infinite variety of agricultural conditions, that any suggestion with respect to a particular section of the country or state, in the matter of a farm location, must necessarily be of a very general character. Let us assume that you have been thinking over this question of moving out to a farm. If your inquiries have been at all extensive you must have received a great mass of literature from chambers of commerce, railroads, real-estate agents, etc., telling of the advantages of this, that, and the other place. If you are at a loss where to go, it cannot have been that you have seen no opportunities, but that your hesitation springs from the abundance of them. For wherever you who read this may be, there are openings all around you, waiting to be appropriated.

Unless there be some special reason other-

WHERE TO GO—WHAT STATE

wise, it is a pretty safe rule to stick to your own state. This applies more directly, of course, to a married man with a family. A single man, with no home ties and responsibilities, naturally would feel freer to wander afar, should fancy so dictate. Perhaps it might be better still to make an investigation first around in your own county or neighborhood. If you contemplate buying, you would perhaps be more familiar with the value of the land, could more readily acquaint yourself with market possibilities, would know more about the people you would live among, and often it is very essential that the expense involved in moving be taken into consideration. Then again, what might appear to you as disadvantages in a section of the country near your home, and so influence you to seek elsewhere, perhaps in a distant state, might turn out, after all, to be not so serious as other drawbacks you would encounter after having traveled a long distance in the hoping of finding a locality measuring up more nearly to the plans you have in view.

Now let us be a little more specific. You are a shipping-clerk in Boston, a store salesman in Philadelphia, or a street-car conductor or a teamster in New York. You are

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not making much headway in town. Expenses are advancing far more rapidly than your wages are increasing, and the purchasing power of your weekly "envelope" that you take home Saturday night has shriveled until it buys just about half as much as it used to. You are living in a "two-by-four" flat, "so small," as Frank Wing, the Virginia humorist, describes it, "that every time you lean out the front window your back suspender-button scratches the paint off the kitchen wall." You see your children growing up in the streets and you and your good wife are in constant dread of their being crushed and mangled by some automobile or trolley-car. You and the wife have been thinking a good deal about this farming scheme, and at last have definitely resolved to break away from the city. Now, instead of striking off 'way out to Missouri or down to Louisiana because you have been reading about the attractive farm homes offered there, why not look up something nearer at hand?

No matter how many farm catalogues you have pored over, no matter how many pretty pictures you have gazed upon, you can never get any sort of an adequate idea of a place until you go and see it with your own eyes.

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Traveling comes high these days, and the money spent on a long trip will come in mighty handy when once you get settled in your new home. For returns are terribly slow the first year, and there are so many absolutely necessary outlays in getting things going. A train ride of from one to three hours from any one of the above-mentioned cities will take one to any number of desirable farms for sale or rent, or to any number of big farms where the owners are in need of help. They prefer the family man, by the way, and offer comfortable houses with free fuel, milk, and vegetables. The pay ranges from fifty dollars to seventy-five dollars a month, and even more. I mention New York, Philadelphia, and Boston merely by way of example. The same situation could be cited with regard to Chicago or San Francisco, Atlanta or St. Paul, or any other large center.

Distance lends enchantment and many have journeyed hundreds, even thousands, of miles in quest of things that lay all the while at their own doors. The writer is acquainted with two Long Island, New York, farmers. They had been farming for years on Long Island and were doing well, growing truck and selling it at the Wallabout Market

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in Brooklyn. One of them got it into his head that there were big chances for him in Oklahoma, and the other harbored a notion that he could do better up in Connecticut. So they sold out and hied themselves to pastures new. In two years the Oklahoma enthusiast was back on Long Island after having sunk three thousand dollars, and the Connecticut victim returned in seven years, mortgaged to the limit. Of course, this is not intended as any reflection whatever upon either Oklahoma or Connecticut. There is no end to the successful farmers in both of those great states and both are rich in agricultural possibilities. It simply means that these two Long Island men went up against farming conditions that were new and strange to them. Their New York State methods and their New York State experiences were not adaptable to Connecticut and Oklahoma. An Oklahoma man, versed in Western ways, or a Connecticut man who had been accustomed to farming as it is done in New England, might very well have been similarly disillusioned by pulling up stakes and settling on Long Island, there tackling problems different from anything they had hitherto been called on to face.

So, as a broad proposition, the writer



By courtesy of U. S. Dept. of Agriculture

A GOOD TYPE OF MOUNTAIN FARM



WHERE TO GO—WHAT STATE

would suggest that if you are living in the West, look up a Western farm; if you are in the South, proceed with caution in getting away from a territory so attractive; and if in New England, bear in mind the great industrial population, the unrivaled transportation facilities, and the proximity to markets of those thriving states. Anything approaching an analysis of the farming situation in any given state would be entirely out of place in these pages. Volumes by the hundreds and literature by the ton are within easy reach, setting forth in minute detail all the information that any one could possibly desire. The government reclamation and land-settlement projects of the West and South; the cotton and rice and sugar-cane fields of Dixie; the corn, hog, and dairy farms of the Middle West; the stock-farms and the tobacco-farms of Kentucky; the cattle-ranches of the Texas plains; the sheep-herding of Wyoming and adjoining states; the all-the-year-around planting in Florida, "the nation's garden"; the orchards and dairies of New York and New England; the trucking of New Jersey, Delaware, and on down the coasts of Maryland, Virginia, the Carolinas, and Georgia; the grain states of the Northwest; the broad prairies of Kan-

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sas, "that feed the world"; the fruit and grain lands of California; the apple-growing of Oregon and Washington—all have their champions. Study well the opportunities that each section offers, weigh its good points and its bad points and compare them with the advantages and shortcomings of some other section. Determine at least in a general way what line of farming you intend to undertake, figure up your available capital, and finally choose your state.

Next begin a thorough and systematic investigation with a view to selecting a particular locality. Let us assume that you have acquired numerous descriptive lists of available farms. Some of these may have been furnished by the real-estate agents, some may have been kindly sent to you by the various state experiment stations, others you may have obtained by answering newspaper advertisements or yourself inserting advertisements and receiving a flood of replies. Go over these lists carefully, and when you have hit upon one that appears as though it might be about what you are seeking, and its price and terms suit your pocketbook, get out your map and see how far it is from the nearest city or town. You must not forget that the success or failure of your enter-

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prise is going to hinge very largely on the question of markets. No matter how diligently you labor and no matter how abundant your crops are, you will fail unless you find a good market for your wares. Study the methods of transportation—by boat or train or trolley—and whether you will have to depend upon your own farm team or automobile. If the place in which you have become interested is some distance away from your present home, examine into the climate and the seasons, the period between frosts. Find out about the schools. Some rural districts are more advanced than others in this regard. In short, gather all the preliminary data possible and then go look things over for yourself. By such a process of elimination you will save a great deal of fruitless traveling and considerable money, and render it far easier and quicker to make your final selection.

All these considerations may play a very important part later on in your endeavors to make a wise decision, so it were best that you proceed with the utmost deliberation and care. You are about to take a step that means a great change in the course of your career. "I am in an awful hurry, coachman; drive slowly," says an Italian proverb.

IV

SELECTING A FARM

IN choosing a farm there are five prime values that should be kept uppermost in mind—home value, agricultural and economic value, healthfulness value, community or neighborhood value, and markets value. In the first place, you are going to make the farm your home. You will have to live there as well as work there, and a man wants to live as well as he can afford. But however attractive the home itself may be, do not forget that a fine house will never produce good crops, that a charming panorama will not pasture your animals in summer or shelter them in winter. On the other hand, let not too much stress be put upon the economic and market features lest there be too great sacrifice exacted from the personal comforts the farm should afford. Again, there should be that careful balancing of the

SELECTING A FARM

pros and cons, as it were, to arrive at a happy medium. The same may be said as to the desirability of the neighborhood with respect to the educational facilities and social surroundings, as weighed against healthfulness of climate. Certainly near-by schools and accessibility to markets are highly important, but it would be a grievous mistake to settle down at any place where the physical well-being of every member of the family could not be absolutely assured.

Before making your inspection of a farm prepare a list of the points that demand special attention. Let us call it a score-card. It is not to be supposed that you are going to accept the first place visited. If it should apparently fill the bill, pass on after looking it over thoroughly and continue the search. You may find something still more to your liking or you may not. In any event it will be easy to return to the first choice. Jot down in your note-book the data obtained at each place, so that in rendering final judgment you will not have overlooked something that may lead to regrets long afterward when it is too late.

There are just about one hundred chances to one against a haphazard selection of a farm turning out satisfactorily. Do not let

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your eagerness and enthusiasm blind you to details. At the same time, there is danger of becoming so deeply engrossed in minor details that some wholly vital consideration may escape notice. There is a story of a commuter who labored in his cellar during his spare hours in the evening for an entire winter, building a chicken-coop. He was a very painstaking worker. Every board had to fit just so, and every corner squared with perfect nicety. Even in the painting of it the color scheme of the trimmings blended harmoniously and artistically with the body of the structure. It was a little gem, a hen-house that would be an ornament and not a back-yard eyesore such as the ramshackle affair that graced his neighbor's rear premises. But, lo and behold! when the man started to take his architectural masterpiece out of the cellar the pesky thing was too big to pass through the doorway.

We read a good deal nowadays about abandoned farms, how some quaint old-fashioned building has been restored to its original beauty and its weed-covered acres brought up to a high state of cultivation. There is no denying that there is a certain charm about these picturesque old homesteads, hallowed by time and rich in mem-

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ories of bygone years, and many of them have been transformed into delightful retreats, but a poor man starting out to dig his livelihood out of the ground would do well to give most of such places a wide berth. It is all very well if you have the money to indulge such a hobby, but if your funds are low leave the run-down places to people with fat pocketbooks or to those skilled in the science of soil rejuvenation.

It is scarcely necessary to say that the farm dwelling should be subjected to close scrutiny. Speaking broadly, immediate or urgent repairs should not be necessary. There might be a case where the closing of the transaction revolved around some comparatively inexpensive alterations or improvements, the farm being desirable in all other essentials. Then a house needing repairs might be acceptable. As it is the purpose of the writer to give a broad outline, allowance must always be made for exceptions in the suggestions advanced. A general guide of this nature and scope cannot be given with mathematical precision. So we repeat, steer clear of dilapidated buildings. This is addressed especially to the man of limited means. There is little time the first year to be spent overhauling and remodeling.

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Look well to the interior arrangements, too. Of course, a city couple cannot expect to find in the average farm-house all the labor-saving devices and comforts of a modern apartment, but even in the country there are certain conveniences that should be considered indispensable. Decision upon this point may safely be left to the wife. After her survey she should try to picture herself performing her routine duties in her new kitchen. By exercising a little foresight one cannot go very far wrong.

In looking over things outside keep in mind what line of agriculture you intend to pursue. If you plan to go in for dairying, for instance, note well the barn—whether it will be large enough for your needs, whether there is a silo, and, above all, the barn's state of repair. If it is going to require re-shingling and painting shortly, just look ahead for a moment at that two hundred dollars that must come out of the returns at that time. There will be plenty of places to put that two hundred dollars when the taxes and the mortgage fall due. If you expect to raise hogs, how about the necessary buildings? The same pertains to sheep, horses, poultry, cattle, or other live stock. A suggestion along this line would be to

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confine your quest at first to farms that have produced the crops you have in view. A wheat-ranch could not be expected to have the equipment for a dairy-farm. Is there adequate pasturage, has it a running brook, is a portion of it shaded, and last, but not least, is it properly fenced? A farmer with a herd of cows and broken-down fences would be a logical candidate for the sympathy of his bitterest enemy.

You will want to learn as much as possible about the character of the soil, its adaptability to the crops you aim to grow, how the land lies, and how stony it is. Some stony soils have been known to yield bumper harvests, but the writer would not recommend such land to a beginner. It requires a patience founded on the Rock of Ages to plow, cultivate, and mow over a sea of assorted stones. Some small part of the farm may contain such fields without it being set down as a fatal disqualification, but if all the tillable soil is similarly infested, the prospective purchaser would show wisdom in moving along.

Shall it be a large or small farm? This has been a mooted question among farmers for a great many years, and it is just as far from being settled now as ever. For the

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beginner this vague suggestion may be vouchsafed: Don't undertake too large a place. "A little farm well tilled, a little barn well filled, and a little wife well willed" is not only a pretty sentiment, but is sound philosophy. Many farms are unprofitable because too much is planted. One hundred bushels of corn can be raised much more easily on one acre well tilled and nourished than on two indifferently cultivated and insufficiently fertilized. Economy of labor goes to the very root of the whole business. I don't care how profound your knowledge of the chemistry of agriculture, how deeply you may be versed in the science of crop rotation, how skilled you are in feeding animals for profits, if you waste your labor you have set the brakes for the up-hill pull.

How about capital? This is a problem which doubtless you have pondered long and earnestly. If you have a thousand dollars or so cash in hand it is going to simplify matters for you, but do not be discouraged even should one or two hundred be the extent of your resources. The man in the latter class should hold tightly to his one or two hundred and go to work on some up-to-date farm for wages. There never was a time in the history of this country when the

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farm-hand was so well paid as he is to-day. In many respects, even with enough capital to buy for yourself, this might be a wiser plan than launching out on one's own account. In all cases there is the ever-present possibility that farm work may not suit you. A year or two of practical experience with modern methods will be of incalculable value when you are finally in a position to go it alone. And so with regard to renting a place. Unless you are reasonably sure that you will like the work, it might not be a bad idea to become a tenant. There are many thousands of prosperous tenant farmers, mostly in the South and West. As a permanent institution, however, tenancy is not desirable, but as a stepping-stone to ownership and a practical schooling for the beginner it offers excellent opportunities.

In either buying or renting there is a big advantage in obtaining farms already equipped with stock and tools. Many of this kind are available. In this way needed capital may be retained for operations. As to the proportion of capital to be paid in cash, it is wise to have a comfortable margin to tide over the first two years, for that is the test period for the novice. If he can weather the first two years without getting any deeper

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into debt than when he started he is "out of the woods." Where land is cheap and the rise in value is certain, one may, of course, put more money in land than when it is high and in a settled community near local markets. But whatever you do, bear in mind the importance of a life-boat in the form of a reserve fund.

V

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TAKE any department of farming you please and there will be found many failures and many successes, as in every other pursuit of life. Just as agriculture as a whole offers limitless opportunities, so each particular line is fraught with rich possibilities, provided the right man gets in the right place.

There are some iconoclasts who make a practice of deriding every attempt to encourage the city man in his farming aspirations, and they jeer at so-called "back to the land movements" as dreamy sentimentalism. They admit that "the passion for the city" has assumed alarming proportions, threatening the foundation of national progress and prosperity, but that the only way to correct this danger is to make agriculture more attractive as a business proposi-

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tion and bring about betterments in the social condition of the rural population. That is well, but it isn't all of the story. There is a vast number of farming "misfits." True, they were brought up on the farm, many of them, but they will never succeed. They may jog along and contrive to keep the wolf from the door, but they will not accomplish anything worth while. These same men might achieve fame and fortune in some line of endeavor where their natural inclinations fitted them for the work. I used to know a barber who had graduated with high honors from Yale University. He was justly proud of his Alma Mater, and his class photograph hung on the wall of his little shop. He wasn't even a successful barber and was glad enough to sell out for two hundred dollars.

After that I lost sight of him, so do not know what occupation he next took up. He was a failure as a barber, but in some other vocation he might have climbed to the top. The man had not "struck his stride." And all over this broad land of ours are farms occupied by men similarly out of place. They will continue to drift into industrial and commercial activities, and their places and the places of others who are quitting the farms for one reason or another must be

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filled from the overcrowded city population. Every year men are leaving the cities and going to the farms, and the movement will grow. Up to this time it has not kept pace with the trend from the farms to the cities.

A city man who has reached the conclusion that the farm holds out a better chance of his getting on in the world than his present occupation in town promises, and who has sufficient confidence in his determination to win, need have no hesitancy in embarking upon a farm enterprise. One of the most prominent dairymen in Connecticut told me not long ago that he was a school-teacher thirty-five years old when he left the city. For many years after he gave up teaching school this farmer peddled milk in the city of Hartford. He was one of the men who "couldn't plow a straight furrow," as some of the iconoclasts tell us, but he soon learned, and now, after fifteen years or more, he is able to hire somebody else to do his plowing.

Any suggestion concerning a particular branch of agriculture would depend in large measure upon one's personal tastes and physical strength. If you are of a robust constitution there is only one possible suggestion, and that is, undertake the work that

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interests you most. There is a variety of choices, each one requiring its own peculiar fitness and training if a marked degree of success is to be attained. This is an era of farm specialization and no one person can be expected to master the subject of agriculture in all its ramifications. There are also certain temperamental distinctions. For example, some men are better adapted for the broad expanses of the grain-ranches than for the circumscribed market-garden. Some persons would fail dismally at truck-farming simply because they haven't the patience to buckle down to the exacting details. This is where the intensive methods are put to the most profitable use. These intensive methods, however, it must be borne in mind, require a great deal of labor and management of a high order. The beginner on a truck-farm should take care not to map out more the first year than he can carry through. Try to arrange your plantings so that there will be a succession of harvests, and in this way prevent the spoiling of some important crop before it can be gathered. As an illustration, take an acre of peas. With a machine one man can quickly do the planting, and the use of a one-horse cultivator makes the tilling an easy matter, but one man is

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lost in that acre of peas when the time for picking rolls around. The seeding of the crops is a comparatively light task. The harvesting and marketing will put you to one of your first severe tests.

To undertake to cover the various kinds of farm operations would drag this chapter out to tedious and unnecessary length, but it might not be amiss to mention the importance of quick-cash crops, especially from a beginner's point of view. The cereal crops of the North and the tobacco and cotton products of the South bring in early returns; so do hogs, truck, and poultry, whereas beef, mutton, and wool require a longer period for the realization of profits. In dairying there is a constant income and, much too often, a continual expenditure for concentrated feeds. But progressive dairymen perceive the folly of buying so much grain for their cows, and those who enjoy the biggest net earnings are the men who produce all or nearly all of the heavy feed on their own farms. There may be exceptions to this in the grain-producing Western states, but some of the Eastern milk-producers, owing to their staggering grain bills, have simply been exchanging an old dollar for a new one. There used to be an old joke up in Connecticut

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that dairy-farming was the only business on earth which could go on year after year losing money and still make a living for the owner. If this be true a beginner should feel encouraged. As a matter of fact, dairy-farming is one of the most attractive branches of agriculture, and within the next few years it will unquestionably experience a rapid development, especially in the Southern states. One of the requisites to the success of any business enterprise is the certainty of markets for its products. There is an assured market for all the dairy products that can be produced in the Southeastern states. For it is shown that every year that section of the country sends out millions of dollars to the North and West for butter, condensed milk, and cheese. Southern farmers can, therefore, rely upon their home markets to take all their dairy products for many years to come, and when their home markets have been fully supplied the constantly growing demand of the densely populated Northeast will enable them still further to expand their production. An inexperienced man with small capital would have to start in on a modest scale, which would be wiser, anyway. His early mistakes would not be of such vital consequence, and with some crop

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diversification to help meet expenses he would run less chance of failure than perhaps in any other line of farming.

Nut culture is popular, especially as a side-line. Of course, it need not necessarily be a side-line. A great many farmers are devoting their entire time to it. A grove of mature nut-bearing trees, however, is expensive and may be beyond your means. Its attractiveness, from a beginner's point of view, lies in the comparative small expenditure of time and money involved in getting a young grove started. While you are earning your living on the rest of the farm your nut-trees are gradually nearing the time when the cash returns from them will begin to come in. A fairly large pecan, almond, hazlenut, or English-walnut grove means independence. As yet most of the English walnuts, almonds, and hazlenuts are produced, as commercial crops, on the Pacific coast; but the pecan, the most important native nut of America, will grow in almost every state in the union. Chestnuts also are grown all the way from Maine south as far as Georgia, and west to Michigan. The scientists have found a way to control the blight that killed off so many of the old trees. Large quantities of other nuts, such

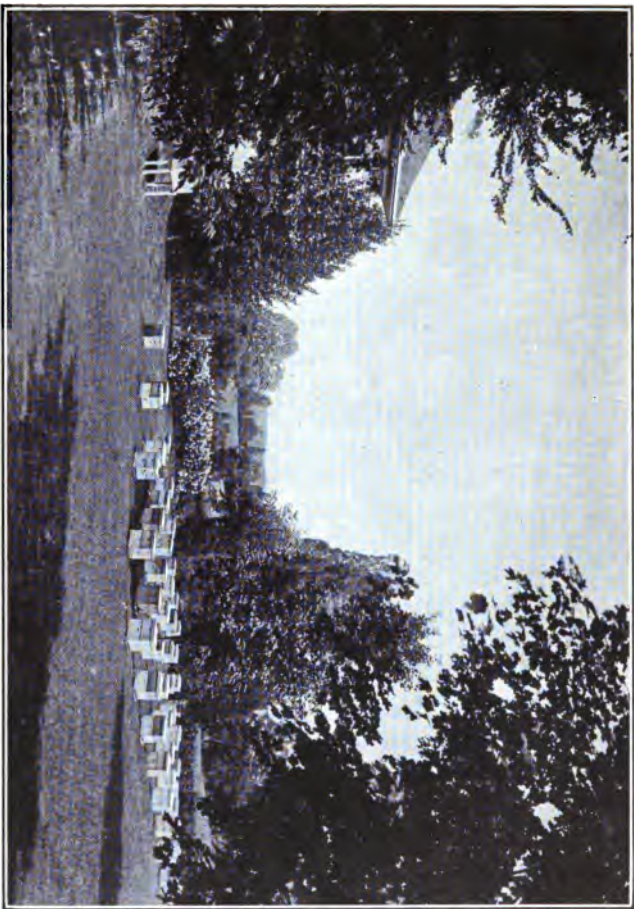
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as hickory-nuts and black walnuts, are gathered from wild trees.

It is the looking forward that will count in the end on your farm. It will require about fifteen years for a pecan-grove to reach the height of its productivity, though it will yield fairly well in ten. That may seem a long time, but if it will add from five to fifteen thousand dollars to the value of the farm, you must admit that it is worth waiting for and working for. It will be equivalent to putting several hundred dollars a year in the bank.

Bees, if given proper care, yield very satisfactory profits. The work is interesting and is not laborious. A woman can easily attend to a large apiary.

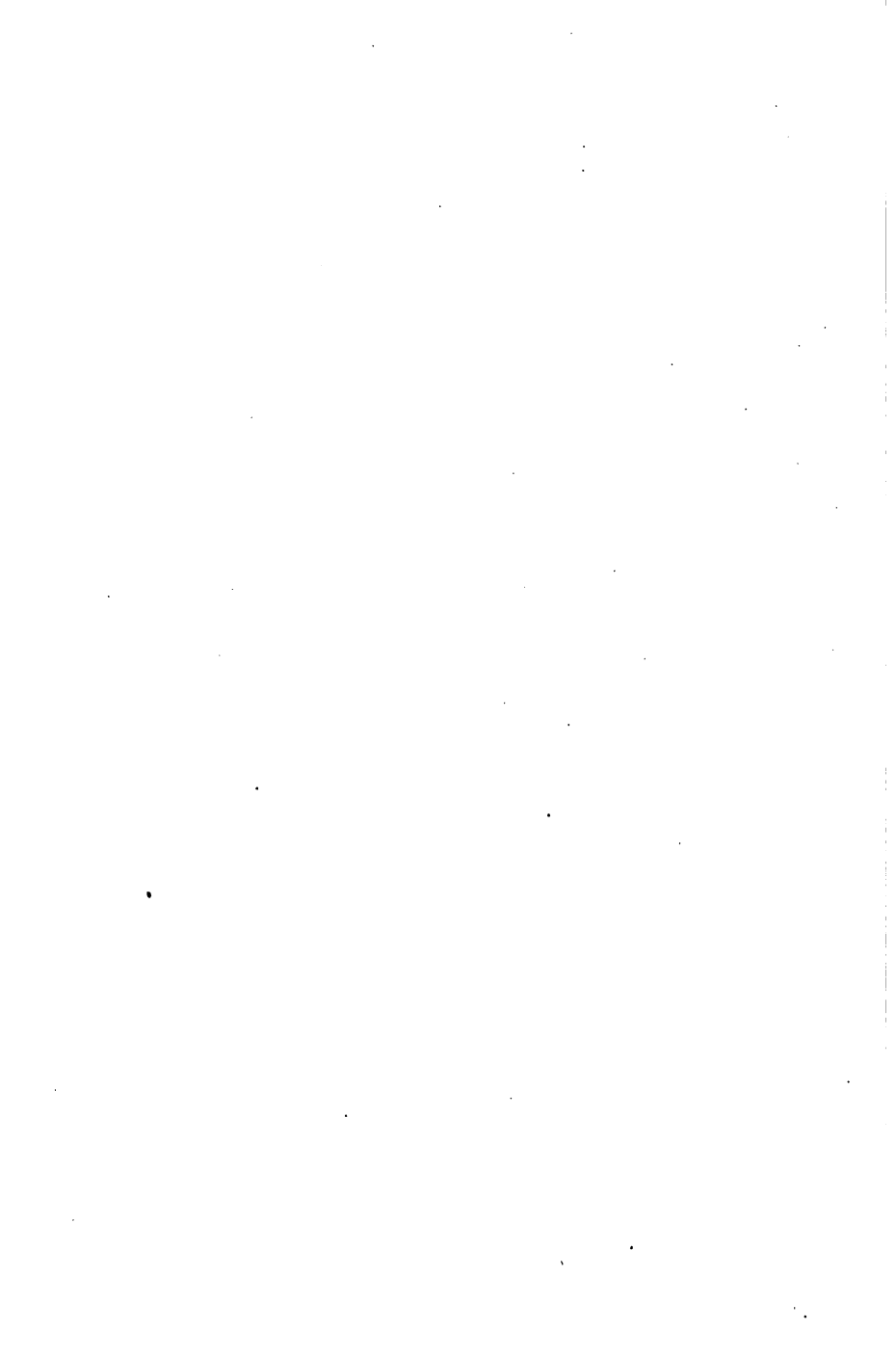
Poultry-raising is a good business. Its rudiments can be mastered in a suburban back yard. Many successful men and women have begun just that way. The work is not so laborious as in some other farm activities, and would appeal strongly to one unequal to the strain of heavy manual toil. Orchard-ing is another branch that gives good returns with less actual labor involved than even poultry demands. Peaches, plums, and cherries must be picked and marketed quickly, being highly perishable, hence are less de-



By courtesy of U. S. Dept. of Agriculture

A WELL-KEPT APIARY

Bees, if given proper care, yield very satisfactory profits. A woman can easily attend to a large apiary.



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sirable for a beginner, who may be handicapped by a lack of knowledge of the labor and selling situations, than apples, which, if of good quality and accessible to good local markets, can be sold without difficulty on the trees, the owner being relieved of all handling. To be sure, fruit trees require close attention, but all the novice need worry about the first year is the spraying and pruning. This is not so formidable an undertaking as might be supposed. Expert advice is always readily available as to any other information desired, so that the trees are not likely to suffer any great damage while the beginner is getting his bearings. Reading the hundreds of government pamphlets and the scores of experiment-station bulletins, detailing the various diseases that beset fruit trees and the hordes of destructive insects that prey upon them, is a good deal like a perusal of the family almanac. A man who studies the almanac too assiduously will soon find in himself the symptoms of every malady known to medical science, though, in reality, he may be as sound as a dollar. Spray your trees three or four times in the spring as required, and your neighbor who has been producing fruit for years and knows all the ins and outs will furnish you with any ad-

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ditional advice. You are going to find those neighbors invaluable. Watch their methods and don't be afraid to ask questions. Don't essay novelties at the start in the way of farming. The types of farming that have survived in a particular locality are the ones that have stood the test. And, finally, take heed to the warning of Willis P. Rogers: "Don't be bull-headed with the land. Don't persist in trying to grow merely what *you* want to grow, without ever giving a thought to what the land wants to grow."

VI

CROP DIVERSIFICATION AND SIDE-LINES

EVERY farm should be self-supporting so far as such a plan is consistent with profits. Nine out of ten farmers buy too many products that could very well be grown at home. This would not apply to market-gardeners who till the soil on an intensified scale. Such men would not be justified, for instance, in planting oats for their horses on land that was yielding them five hundred bushels of onions to the acre. But take the average dairy, cotton, tobacco, grain, or fruit farmers, and the persistency with which most of them have clung to the single-crop system has been one of the great and outstanding faults of American agriculture. The tendency in recent years has been to overcome, to a certain extent, this extremely short-sighted policy, but there is still room for improvement.

A beginner might just as easily start out

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on the right track as the wrong one. So, whatever line of farming you may decide to embark upon, don't make the mistake of concentrating all your energies and capital on one crop. The one-crop system was for two generations the curse of the Southern states. While cotton has been the source of immense wealth to that section, it has undoubtedly been one of its greatest industrial handicaps. The Southerners, however, are waking up to the advantages of diversification, and we may expect in the next few years a rapidly increasing development of its agricultural resources. By planting a few side-line crops one is taking out the best possible insurance against disaster. If one product fails, there is another to fall back on. If the blight or scab ruins the potatoes, the bumper tomato output may save the day. If both succumb to weather and insects, the apple-trees in the autumn may pull you through the year. There is altogether too much dependent upon a single product to make it wise to stake the success of a whole season's operations on it. There are always the uncertainties of the weather, the possibility of an unsettled market, or the invasion of some new pest that may lay everything in waste before it can be got under control.

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The average farmer doesn't attach nearly the importance to poultry that the industry deserves. Most farms have a few chickens that get their living as best they can. Some days a few handfuls of grain are thrown out to them, and there are a good many other days when they go unfed. They must forage diligently or starve. Whenever the wives are able to find time from their household duties to give the fowls even a moderate amount of attention, it is surprising to note the gratifying results. It is related that a certain thrifty housewife took great interest in her chickens, ducks, and turkeys, and kept an accurate record of her sales for ten years, not counting what the family consumed. It was found at the end of ten years that she had sold two thousand dollars' worth of poultry and eggs. The money, as received, was turned into the common fund. In the mean time the farm, costing four thousand dollars, had been paid for. In other words, while the rest of the farm operations supported the family, paid the taxes, insurance, interest on the mortgage, and two hundred dollars a year on the principal, the woman's poultry returns wiped out half the original debt.

Some years ago an acquaintance of the

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writer quit the city and started on a small farm in central Ohio. It seemed that the fates were against him from the beginning. Continual rains in the spring put him 'way behind in his planting, and this was followed by a drought of which even the oldest inhabitant could recall no parallel. He saw all his hard toil going for naught, and he shuddered as he contemplated his fertilizer bill, due in the fall. But along with his little farm went an apple-orchard of about two acres that had been a hobby of the previous owner of the place. Everything was a failure that first year but the apples. They alone weathered the drought and netted the owner about four hundred dollars, so that he broke even for the year. But for those apples he might have returned to the city and still be a clerk in a dry-goods store, instead of one of the biggest producers of hogs in the Middle West.

Money paid out for stock feed is what keeps many a farmer's nose to the grindstone. Especially is this true in the Eastern states. A man with a small herd of cows and a team of horses can easily put all the profits of his farm in his animals' mangers by depending on the feed-store for his grain. In the first place, there should be a silo on

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the farm. I don't care if you have but six cows, there should be a silo. Fill the silo from the corn-field, retaining part of the crop to dry, so you will have ear corn enough to winter the horses. The remaining dry stalks may be fed as roughage. The experts will say, of course, that oats are the best feed for horses, and so they are, but a horse can get through the winter mighty well on corn, with a little bran as a laxative. At the price oats have been in recent years it is nothing short of folly to feed bought oats to your team all the year around. Just be careful in your use of corn and there will be no trouble. I would not be so positive about this if I had not had actual experience along this line year after year, and I know whereof I speak. I stress this point because these stock-feed bills will make no end of trouble for the beginner unless he starts right away to devise means of heading them off.

Then again, if there is no alfalfa-field on the farm, get one planted without delay. There is hardly a section in the United States where this wonderful plant will not thrive. The government bulletins will give you such clear and explicit directions as to the preparation of the soil that you can't go wrong. With alfalfa in your barn, silage in your silo,

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your corn-crib filled, a couple of pigs fattening in the pen, a few cords of wood under the shed, a barrel or so of apples and your supply of cabbage, potatoes, turnips, carrots, and onions in the cellar, your problem for that winter is solved then and there. It is the stoppage of the little leaks at the outset that is going to bring you success. I have utterly failed in my purpose if I have not made it clear that these hints I have been throwing out are for the benefit of the inexperienced man who is beginning in a small way to build a foundation for bigger and better things for the future. If you would get a firm grip from the very first, shut off all except vitally necessary expenditures and make the farm support every living creature on it so far as it is possible. After the first year or two, as you learn to put into practice the ideas you have gained from theoretical study, you will broaden out your field of operations in such directions as are prompted by your inclinations, based on your own knowledge of agriculture, so that many of the suggestions advanced here would not then apply. Nothing is farther from the thoughts of the writer than to undertake to tell an experienced farmer how to run his own business, but if the beginner can be

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directed along the right road in these days of farm progress and opportunities, there need be no fear, if he enjoys the work, of his not making the journey safely.

There passed away not long ago an aged citizen of Connecticut who for fifty years dwelt upon a seventy-five-acre farm. His practice was to make the farm maintain itself. His cash returns were small, but so was his cash outgo. He had so adjusted his affairs that his net profits every year were derived from the sale of four or five milch cows that he had raised on feed that the farm itself produced. It required about two years to mature such an animal. He kept good stock and they brought top prices. When he became too feeble to work he retired with a bank-account sufficient to make him independent for the remainder of his life. Meanwhile he had lived comfortably, free from the worries that beset many a city man, and reared a large family, all of whom turned out to be useful and respected men and women. This man farmed in the old-fashioned way, had few labor-saving tools, and made little or no effort to keep abreast of agricultural progress. That same man starting out to-day, with the advantages of new methods and modern machinery, would

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have fortune within his grasp. He had learned the secret of successful farming. A farm that is self-supporting or approximately so is bound to succeed.

I know there are many pretty stories in the books and magazines about buying two or three acres of stump land somewhere, putting up a shack on it, and getting rich in a few years. Well, some of the foreigners may be able to get a start that way, and many of them do, perhaps, but we Americans, with our different standard of living, would not be satisfied to do so, and I do not believe many of us would succeed if we did undertake such an enterprise. The kind of city man the writer has in mind would acquire a general farm where, with the use of labor-saving machinery, he could grow enough even the first year to keep expenses down to a minimum. If he has not much to take to market that first year he will also not be going into town very often for supplies. Friends, I had to learn the things I am telling here by some pretty hard knocks. I bought on credit in the spring, counting on crops in the fall that did not materialize. So during your first year at farming purchase just as little as you can. Husband your resources and make the land feed your live

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stock and family. Later on it may be that you can buy many of the necessities that it would not pay you to produce, but until you graduate from the ranks of the novice and can feel that you are a full-fledged farmer, just strive to keep down expenses and let the profits wait awhile. They will come in due time. There is no royal road to wealth in agriculture any more than there is a royal road to learning.

VII

THE FARM ITS OWN FERTILIZER-PLANT

ONE of the first things you will learn in your seeding, tilling, and harvesting is that each one of your crops requires and exacts its peculiar nourishment. If the land is deficient in the soil elements needed—and most lands that have been cultivated for a number of years are deficient to a more or less extent in the necessary plant foods—then you will have to supply the shortage yourself. But how? Well, there are three principal methods. Scattering manure over the land, going to town and buying commercial fertilizers, and letting nature supply you free of charge. The last-mentioned proposition sounds reasonable enough, doesn't it? Yet there are a great many men making their living on farms who fail to draw upon a great and never-ending source of plant nourishment that is everywhere around them,

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begging, so to speak, to be put to some useful agricultural purpose. These men have not yet realized the importance of the nitrogen-producing legumes and the advantages of crop rotation as a means of preventing the land from being depleted of its life-giving substances.

The beginner, even before he starts his farm work, should study up on this question of fertilizers and legumes, so that he will have at least a general idea of the situation. As farmers enlarge their operations they must use increasing quantities of commercial fertilizers, but in purchasing it they should understand what they are getting and how to apply it to the soil if they are to secure their money's worth. Alfalfa, clover, cow-peas, soy beans, and other legumes obtain nitrogen and carbon and store it for succeeding crops to feed upon. By sandwiching these legumes in between other crops we are enabled to maintain the fertility of the land without reducing our harvests. The use of barn-yard manure, wood ashes, and the plowing under of green crops in connection with the legumes, will help the beginner to cut down his fertilizer expenses while he is familiarizing himself with the profitable utilization of the commercial plant foods.

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Alfalfa, besides being the best all-round forage that the farm produces, is the best of the legumes as a renewer and conserver of the soil. It has a remarkable system of roots which sometimes penetrate to a depth of twenty feet. Millions of putrefying bacteria make their homes in the tubercles of the root system of one plant. Through the action of these bacteria nitrogen is taken directly from the air and added to the soil in such form that it can be used by other crops. Since nitrogen is one of the soil elements first to become exhausted, it is clear that production of alfalfa can do much to reclaim worn-out soils. The deep-rooting system of the alfalfa plant also enables it to bring minerals from the lower layer of the soil and deposit them near the surface where other plants can use them. The roots upon decaying add much organic matter to the soil in the form of humus. The abundant roots also increase the porosity of the soil and so favor drainage and the introduction of air to the roots of the growing plants. If many experienced farmers paid more attention to this subject there would be a vast sum of money saved every year in this country on fertilizer bills. Too many farmers use expensive commercial fertilizers indis-

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criminate. It would be the part of wisdom to go slow in the beginning in your purchase of the prepared fertilizers. There are reputable dealers who deliver what you pay for and there are some who do not. Another point you must figure on, and that is whether or not you are going to get out of the crop what you put into it in the form of high-priced potash or nitrate or phosphate. Consult the nearest experiment station before you spend a lot of money, possibly to little purpose. Send the experts a sample of your soil and they will tell you what sort of fertilizer you will need for a particular crop.

Now we will get back to the question of the legumes and rotation. I would not dwell so persistently on this point if it were not the real basis of your undertaking. It is the foundation of agriculture, in fact. If the land is sucked dry of its vital elements the whole structure of farming crumbles. We know how it has been with the rich prairies of the West, what abundant grain crops those lands yielded in the early years of their settlement, but which gradually decreased as the same crops were grown upon them season after season. The Southern lands have suffered in like manner from this failure to adopt the rotation plan. The writer was

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born and brought up on a cotton-plantation in central Alabama. No one in our community apparently ever gave a thought to any process of soil recuperation. My father was reckoned a successful planter in those days. He had about one thousand acres in cotton and corn. There was one section of the farm known as "the battle-field," where a celebrated engagement between two Indian tribes was fought in the seventeenth century. For more than thirty years "the battle-field" was planted in cotton, one of the most voracious of all the plants. Is it any wonder that my father got one-half bale to the acre, even with guano, where my grandfather before him had harvested a bale with no fertilizer at all? Of course, it is different today, but at the time to which I refer it was the universal practice to use the same land for the same crops year in and year out.

We know that a field of one hundred acres, devoted entirely for five years to a rotation of clover, wheat, corn, oats, and potatoes, would yield a far greater output than would that same field if divided into equal parts and devoted to some one of these products for five years. As stated before, each plant requires and exacts its peculiar nourishment. It may be that the five plants above named

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all require lime, potash, phosphorus, nitrogen, carbon, etc., which, besides water, are the chief elements of vegetable structure; but if so, they require them in unequal proportions or quantities. Grown each on its own twenty acres throughout five years, one will have absorbed all or nearly all of the potash in its division, yet hardly have touched the lime, and so on, while, had the hundred acres been sown in rotation or succession entirely to one and then to another of these crops, or had the five been alternated from portion to portion with each succeeding year, they might have yielded abundantly, yet left no part of the soil depleted of any single element.

In years gone by the farmer had little use for agricultural chemistry. The virgin soil was so well supplied with all the elements needed for plant nutrition that the only thing for him to do was to plant and till and reap a bountiful harvest. Times and conditions have changed. The land does not respond so promptly by merely scratching its back with plow and harrow. It has grown weary and hungry. It now looks for food and coaxing and petting before it can be made to smile with bountiful harvests. The farming of the old days was based upon the

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generosity of nature and the original wealth of the soil. The farming of the present day is changing more and more to a process of manufacturing crops out of raw materials largely supplied by man. The soil only serves as a medium and implement of manufacture.

The development of the potential sources of fertilizer materials in the United States has been commanding special attention in recent years, and during the world war this matter assumed an importance greater than ever before. We are destined soon to become independent of the other nations for our fertilizer supplies. William H. Waggonman, one of our government scientists, points out that only a few years ago it was generally believed, even by the best informed, that the Stassfurt deposits in Germany would be the world's most economic sources of potash salts for almost an indefinite period. It now appears possible that when trade relations are restored between the warring nations this country may have firmly established a potash industry of its own. The recovery of potash from partly desiccated lakes and from the giant kelps of the Pacific coast is now being profitably accomplished, and the saving of the potash volatilized in

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blast furnaces and in the burning of cement has been demonstrated as commercially feasible. The latter two sources, if utilized to their fullest extent, are alone amply sufficient to meet the annual demand of the fertilizer industry for potash salts.

Since combined nitrogen is not only one of the most important fertilizer ingredients, but is essential also in the manufacture of military explosives, the war has done much toward stimulating effort in recovering and producing nitrogen compounds. The modern by-product coke-oven is gradually replacing the old beehive type, and therefore ammonia is being recovered in ever-increasing quantities from the coking of bituminous coal. Moreover, processes for the fixation of atmospheric nitrogen are being so perfected that it is only a question of time when an adequate supply of nitrogen compounds is assured our agricultural interests.

The third important fertilizer ingredient is phosphoric acid, which is the basis of nearly all mixed fertilizers, and is therefore applied to the soil in far greater quantities than either potash or nitrogen compounds. It is gratifying to know that this country possesses greater resources of phosphoric acid than any other nation. Not only have we

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supplied our own agricultural demands, but for years we have been helping to maintain the crop-producing power of European countries by shipping them annually vast quantities of phosphatic materials. Though there are a number of commercial sources of phosphoric acid, such as basic slag, guano, bones, and other organic substances, by far the greater quantity used for fertilizer purposes is derived from phosphorite or amorphous phosphate of lime, of which there are enormous deposits in Florida, Tennessee, Utah, Idaho, Wyoming, and Montana, and smaller deposits in South Carolina, Arkansas, Kentucky, and Virginia.

As this is not a text-book on farming, no attempt will be made to go into details of the use of fertilizers and the practice of crop rotation. Even should the writer deem himself qualified to give such expert advice, which he does not, it would be beyond the province of this small volume. He may be permitted at least to stir your interest and direct you along the way of acquiring such information from those who are able to enlighten you. This is a very important subject and one into which every farmer should delve deep if he would secure the most satisfactory returns from his labor and invest-

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ment. How much may be taken from the land and how much reserve left in the soil, and yet maintain fertility and the most profitable production, is one of the biggest problems the scientific farmer is called upon to solve. The farmer, as a manufacturer of grains, fruits, and vegetables, finds a thorough acquaintance not only with the machinery of nature which furnishes him with his motive power, but also with the various raw materials of which he has to construct his products, fully as indispensable to the highest success as the acquaintance with the various ores is for the manufacturer of steel or the familiarity with the different grades of cotton and wool is for the manufacturer of cloth.

Knowing in advance the importance of this phase of farming, the novice should consult experienced men in mapping out his crops. As I have suggested before, do not hesitate to call upon the experiment stations or the government agencies for information and advice. Remember these men are all specialists in their respective departments and they are daily aiding men who have been farming all their lives. So do not be bashful. It is their business to help the farmers and they cheerfully answer all questions.

VIII

IMPORTANCE OF FARM MACHINERY

THIS is an age of farm machinery, and no farmer can hope to keep abreast of the rapid advances in agriculture who does not make every possible use of labor-saving implements, which are doing away with the drudgery of the old days, at the same time quadrupling one's efficiency. Whether you have a thousand acres or ten acres, you will find modern tools indispensable. Years ago it was a common sight in the West to see fifty men and teams plowing or harvesting on a big grain-ranch. To-day on that same ranch a one-hundred-horse-power tractor plows, sows, and harrows at the same time from eighty to one hundred acres a day or from ten to twelve acres an hour, accomplishing the same work that formerly required the fifty men and teams. The harvester has also been a boon to the West,

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opening up the prairies decades earlier than otherwise would have been possible. I have before me some figures showing the extent of the economies in production effected in this era of machine agriculture. It is stated that in 1830 it required more than three hours of labor to raise a bushel of wheat, while in 1896 the time had been reduced to ten minutes. In 1850 the labor represented in a bushel of corn was four and one-half hours, while in 1894 it had been cut to forty-one minutes. Undoubtedly, since these statistics were compiled there have been still further savings, but I have no such tables at hand.

"The agricultural engineers," says a Western writer, "are holding out promises of a wide and successful application of electricity to the needs of the farm. The farmer is a large user of power and employs a great variety of mechanical devices, but until lately his unfamiliarity with power apparatus and the machinery manufacturers' unfamiliarity with farm methods and needs have stood in the way of an adjustment advantageous to both sides. This difficulty is being overcome." Central extension systems have been established from which electricity is being sold to farmers. Within the next few

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years the progressive farmer will have his electric lights, electric power for his milking-machines and cream-separators, wood-sawing, threshing, and so on, which will enable him to increase his profits and render his occupation and his home life more attractive.

It is interesting to note the rapid increase in popularity of the light motor tractor. These wonderful machines may be put to a score of uses, from plowing to drawing a load of hay to market. They are just now getting a foothold in the East. For a time our Eastern men had an idea that the tractor was adaptable only to the larger areas of the West and South, but that notion has been brushed aside by actual demonstrations on hundreds of comparatively small farms in the Northeastern states. They are inexpensive and easily operated; a woman or a half-grown boy, running one of these tractors, can do the work of several men and teams.

The beginner should bear in mind that machinery is absolutely necessary to his success, and, as I have pointed out in a previous chapter, it would be advisable to get a farm already equipped, or at least partially so. There will be so many expenses the first year that the purchase of any con-



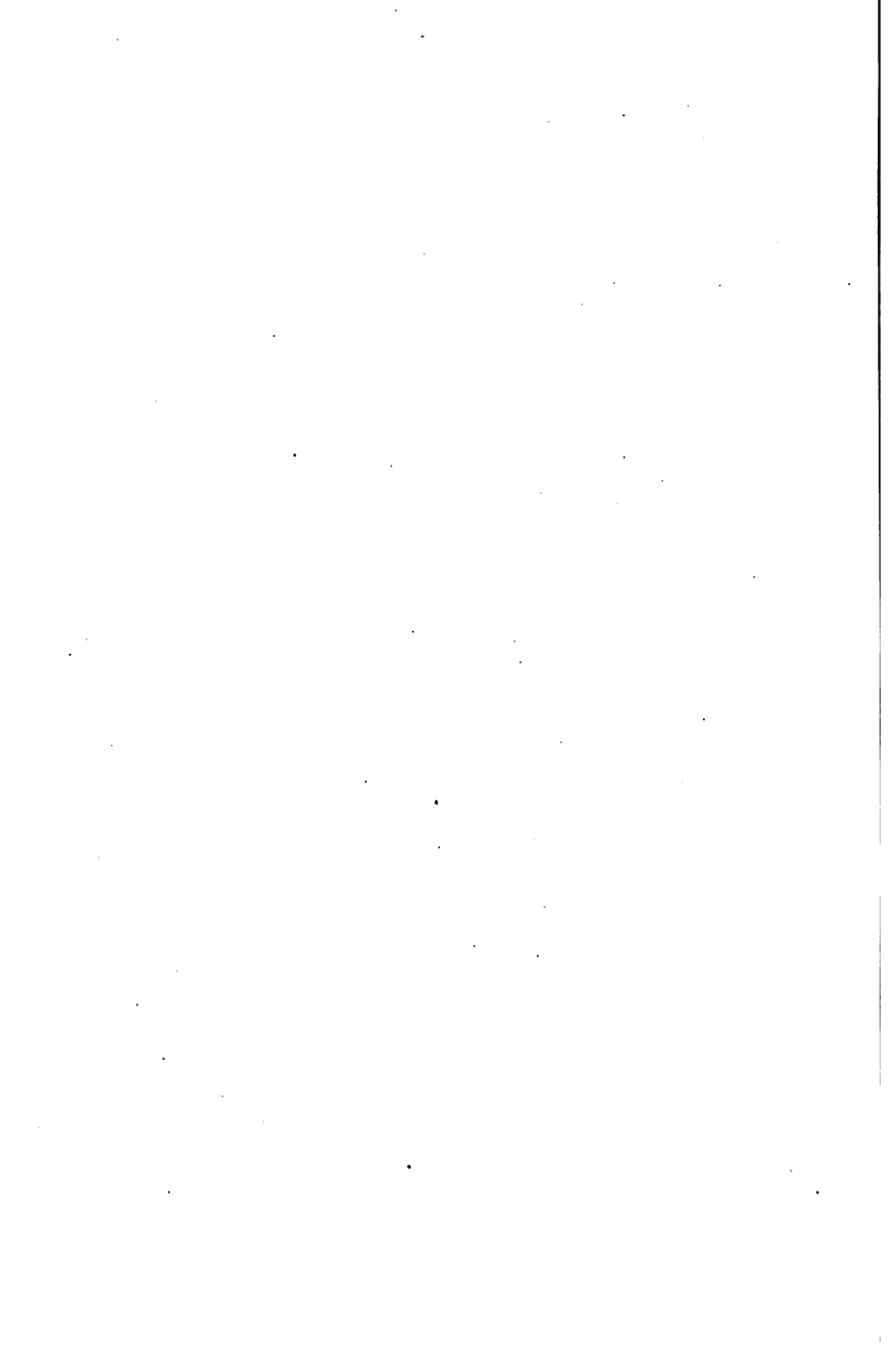
ONE OF THE MANY USES TO WHICH A MOTOR-TRACTOR MAY BE PUT



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considerable amount of new tools may be out of the question. It is well to know in a general way about what implements will be needed. So, after you have determined upon what line of farming you will take up, make a thorough inquiry into what machinery such a farm would need to do the work efficiently and economically. In this way, when you are making your inspection, with your list in hand, you can check off what tools are already on the farm, and then decide if your capital will permit of your buying those that are missing.

If you are in the South and plan a general farm, with cotton as the principal cash crop, get in touch with some cotton-planter and cross-examine him as to your requirements. If you have chosen dairying, interrogate some experienced dairy-farmer; and so with regard to trucking, orcharding, or any other of the various branches of agriculture, ask questions beforehand. Books, bulletins, etc., will serve you well, but the great trouble about them is you can't ask them a question. Their general information may not throw light on some exceptional point that relates to your particular case.

Let us assume that for years you have been doing office work in the city. Your general

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health is good, but you are doubtful if you will be equal to the heavy work of a farm. There is no occasion to hesitate for a moment on that account. This is where the labor-saving machinery comes in. If you can drive a team of horses a sulky-plow will enable you to prepare the land as well, if not better, than the most experienced farmer could possibly do it with a walking-plow, and the work will be very little harder than running an automobile. If your capital is not sufficient for a small tractor or your farm operations do not warrant such a machine, then try to get a riding-plow. If you had the physical strength to handle a walking-plow the chances are that you would make a botch of the plowing the first season. Manipulating a two-horse walking-plow looks easy from the roadside, but it is the hardest sort of toil even for a skilled man versed in all the little tricks and turns to save his muscles. An inexperienced man puts about three times as much energy into such labor as an experienced farmer employs.

When it comes to planting get your machine into play and do the job in one-tenth of the time, much more efficiently, and with a minimum of exertion. Perhaps you have acquired a farm of twenty acres or so of till-

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able land, and want to put in about six acres of corn. A corn-planter will drop the seed and the fertilizer as fast as the team of horses can walk. Furthermore, it will check-row the field so that it can be cultivated both ways. This check-rowing relegates the old-fashioned hoeing to a rear seat. Besides being back-breaking work, hoeing is entirely unnecessary in a corn-field. With your riding-cultivator you can clean out the weeds in that six-acre field in one day's work, whereas at the end of a week, if the weeds were luxuriant—and the most barren land always does produce them in profusion—our good brother with the hoe probably would be just about rounding the half-way post. So you see by utilizing machinery you conserve energy and you save time, and a farmer needs a great deal of both if he hopes to get ahead.

Farming is a continual battle against weeds and insects, but with labor-saving implements both may be easily kept under control, provided the "stitch in time" is taken. Be careful in laying out your work so that you do not get too far behind. Once you fall back a few days, it is doubtful if you ever catch up with the procession that season.

Another piece of machinery that is very

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necessary on an up-to-date farm is a gasoline-engine. Some farmers who own automobiles use their car motors to grind stock feed, saw wood, etc. Manure-spreaders are also valuable. Hauling manure from the barn-yard to the field in a farm wagon and scattering it with a pitchfork is a tedious and laborious task, and, besides, the work is poorly done. A spreader distributes evenly and quickly while you are at your ease on the driver's seat.

A wood-sawing outfit is a most important farm adjunct, too. Besides using it for your own supply of household fuel, there are many opportunities of sawing for your neighbors. In this connection I would call attention to the constant demand for wood in the cities. If possible get a place with a good acreage of woodland. In the winter months, when the regular farm work is slack, you may add a snug sum to your bank-account by cutting, sawing, and marketing your wood. It is just as easy to buy a farm with wood on it as it is without it. I know a man who acquired a farm on credit and paid off the entire mortgage with the proceeds from the wood alone, and then had enough to keep him supplied with fuel for an indefinite time.

Having acquired the necessary machinery,

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be sure to take care of it. How many times have you driven along country roads and seen a plow here, a mowing-machine there, or a wagon yonder, standing outdoors exposed to the weather? When a machine has done its day's work it should be sheltered. A wise old farmer once told me that one night in the open air for a farm implement was equal in wear and tear to one day's usage. I believe it is true. When you put a piece of machinery away for the winter think about the condition it will be in when you need it again. Give it a good oiling. A coat of varnish on a plow will prevent rust during a period of idleness. Trying to turn a furrow with a rusty plow in the damp earth in the springtime will speedily convince you of the value of a little foresight. After a few hours of use a rusty mold-board will show the desired polish, but meanwhile your work has been indifferently done, and the chances are that you have indulged in some expressions scarcely appropriate in polite company. If there is insufficient shelter for your tools provide it as quickly as possible. It will be one of the best investments you ever made.

Machinery is revolutionizing agriculture. Remarkable as are the accomplishments of

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the past, more surprising things are yet to come. A young man just beginning his career or a man who is starting out anew, for one reason or another, very naturally and very properly would prefer a business that held out something for the future. You may be sure that farming is such a business. The inventors will see to it that the tillers of the soil keep pace with the march of progress.

IX

EDUCATION AND CO-OPERATION

THERE was a time when so-called book farming was held in more or less derision among the rural population. I hear some farmers even to-day say: "Oh well, that professor is a good talker, but we can't conduct our business on theories of that kind. His advice sounds all right, but when it comes to putting it into practice, why, that's a horse of another color." These men are the reactionaries in agriculture. They dread innovations. Those striving to improve our conditions have encountered no more stubborn obstacles than this blind prejudice of men who cannot be brought to an understanding of what education means to the farmer. Happily, these non-progressives are dwindling away. It is now universally recognized that the farmer schooled in the nature and properties of soils, the laws which govern

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vegetation and the elements essential to form thrifty plants and animals, will learn from experience, not less, but more, than his uninstructed neighbor. If a beginner waits until he gets into actual farm work before taking up his studies, and should rely upon experience alone to guide him aright, he will make a mistake. There is no rhyme or reason in starting out haphazard, expecting to master farming problems through the errors you make. A few weeks of intensive reading will prove of great value. I am speaking of a family man who intends to step out of city work directly to the farm. As to a young man planning a course at an agricultural college, I believe it would be best for him to get a little practical experience before taking up his college studies. Otherwise he might spend several years at college and discover, after all, that he did not care for farming.

I would not discourage the man who desires to become a farmer by depicting the tilling of the soil as too formidable an undertaking, but it is well to realize, nevertheless, that farming is something big and that success in agriculture is the measure of the intelligent effort put into it. If "genius is an immense capacity for taking pains," so is

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successful farming the result of our earnestness of purpose, our steady and conscientious labor, and the application of our best thought to the tasks that daily confront us. Agriculture lays its contributions upon geology, chemistry, mechanics, metallurgy, zoölogy, and medicine—in a word, in the language of Edmund Burke, “it levies upon the spoils of all the sciences.” Some one has said that “he who causes two blades of grass to grow where one grew before is esteemed a public benefactor, but he is more than this. He is an artist. And if he understands the process through which he attains this result he is a man of science.”

They used to say the agricultural colleges were educating the men away from the farm, but this fallacy has long since been exploded. If a boy decides to stay on the farm with his father it is the height of that father's ambition, if he is a man of progress, to send the son to the agricultural college. He knows he will come back a better farmer. His practical experience will enable him to derive double benefit from his studies. What would we do without our agricultural publications? Too much cannot be said in praise of the help they have been to our farming communities. A farmer who does not read his

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technical journals is either standing still or retrograding in his business. The Federal and the state departments of agriculture are coming more and more in direct contact with the rural population through co-operative demonstration work, the county agents, and the experiment stations.

The foundation for effective work along the line of betterment of farm conditions, however, is successful co-operation among the farmers themselves. We have learned that individualism, no matter how extreme, has its limitations. I know a New England farmer who adopted a policy of "go it alone." With two grown sons to help him he felt it to his advantage to "paddle his own canoe" and let his neighbors do likewise. He neither borrowed nor lent an implement. When silo-filling time came in September and the residents round about gathered first at one place and then another, making it easier and quicker for all, this man held aloof. It was the same with the threshing, or corn-husking, or any of the numerous other occasions on which the farmers nowadays jump in and help one another. The neighbors decided to improve their cattle and "chipped" in for a thousand-dollar bull that was a blessing to that community. My friend

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thought his own scrub bull was good enough, so he continued to raise a certain number of "boarder" cows. In all matters of mutual welfare he was an outsider, a victim of his own short-sightedness and lack of enterprise. He was not a failure as a farmer, by any means; on the contrary, he had been fairly successful, but what success he achieved was in spite of his mistaken policy and not because of it. He would have derived infinitely more satisfaction out of his work, would have been a far more desirable neighbor and unquestionably enjoyed a larger prosperity, if he had not drawn himself into a shell and shut himself off from all business relations with his fellow-citizens.

As an instance of the wisdom of farm co-operation, a neighbor was telling me how a rural community in Vermont saved the farmers a heavy loss by organizing a dairy company. A milk concern, through which the dairymen had been shipping their milk, went into bankruptcy. The milk-plant was to close in a few weeks, leaving the dairymen without a means of disposing of their product. The dairymen's claims against the company were covered by a bond of \$15,000. The farm-bureau president, after conferring with the county agent, called a meeting of the

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executive committee. As the result of this meeting a committee was appointed to attempt to interest the farmers in purchasing the plant. A creamery-equipment expert was secured from the state Department of Agriculture to appraise the value of the plant. Later, a meeting of the patrons was called and it was decided to organize a co-operative dairy company and purchase the milk-plant. The co-operative company assumed the claims of the farmers and issued stock to cover the cost. The quick action was possible because of the county farm - bureau organization.

The beginner should lose no time in attaching himself to the co-operative associations of one sort and another in his neighborhood. Your work will be made lighter and more remunerative and the intercourse with the good people around you will establish friendships that will be a source of gratification deep and abiding.

One of the most beneficial developments in the way of co-operation is that of buying and selling. The newspapers print many columns about community markets, central selling-stations, "from producer to consumer," etc., but they have had very little to say about the equally important progress

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that the farmers are making toward cheaper purchasing of their own supplies. One must read the farm journals to keep informed of the latter, as the question is of no particular interest except to those directly concerned. Grain or fertilizer by the car-load comes many dollars cheaper than could be obtained at a feed-store by the bag. The granges and other organizations long ago inaugurated the neighborhood buying plan. The saving thus effected amounts to many hundreds of dollars a year, even in a small community. Many farmers have not yet fallen in with this scheme and they are paying dearly for their indifference and neglect.

I would suggest that as soon as possible after becoming settled in your new home you apply for membership in some of the farm organizations in your locality. These splendid societies probably have accomplished more toward lifting agriculture to a higher plane than any other single agency. They are made up of public-spirited men and women who proceed on the theory that the best way to help themselves is to help one another. They have constantly driven home the truth that farming is a business and that a business man who doesn't keep an accurate set of books is headed for ruin.

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There is yet a fine field for missionary work in this direction. Thousands of unprofitable cows are maintained simply because their owners decline to go to the trouble of figuring up the cost of each cow's feed and balancing it against the milk returns. A system of accounts, however simple it may be, is imperative, if you hope to make headway. Probably the most fatal mistake of the many mistakes made by feeders is the very common one of letting hogs and cattle eat up the profits while they are being fattened for market. It isn't the price you get, nor the quality of the stock you have for market, which determines how much profit you make. It is the difference between your selling price and the cost of feeding that must be watched with the utmost care. How are you going to do this by trying to keep books in your head or keeping no books at all?

There is no doubt that the marketing of their products is among the biggest problems that the farmers have to face to-day. Until comparatively recent years, unorganized themselves, they have had to contend with every conceivable sort of organization among those who handle their wares. It has been a stupendous task to form them

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into workable business-like associations. The average farmer has no time to retail his products, and when his home markets cannot absorb all of his output he must ship to distant cities. While many striking cases have proved that, too often, there have been betrayals of trust on the part of the city dealers, it is doubtful if it can be demonstrated that all the shortcomings of the commission business as now conducted are the fault of the commission merchant. A government report reminds us that in commission transactions the farmer who makes the shipment is the principal, and the commission merchant is his agent in an implied contract based upon the ordinary charges and practices of the commission business. In all contracts each party has certain rights and certain duties, and unless one of the parties performs all of his duties he has no right to blame the other party for a failure to secure the best results. The failure on the part of both parties to post themselves as to their respective duties leads to most of the trouble. I believe the problem can be solved in a manner that will redound to the interests of all concerned. What the common-sense farmers are trying to bring about is a sane practical solution of their

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ills in marketing, not by any revolutionary movement, but through better business methods, a clearing away of misunderstandings, and the elimination of the crooked middlemen. The commission merchants are dependent upon the farmer, and many of the farmers are dependent, more or less, upon the commission merchants. There is no occasion for pessimism. The chief fault hitherto has been that the farmers have not co-operated wisely at the producing end. Most of the pulling together has been at the receiving end. We are learning this lesson now, and I look for a gradual change for the better. The consumer, pinched by soaring prices, has at last been aroused to action, with the result that many movements have been launched in an effort to bring the city-dwellers into closer touch with the farmers through co-operative markets and direct selling plans.

Rural express routes, that transportation over the highways by motor trucks, connecting rural America with the rest of the country, are spreading rapidly and are proving of incalculable benefit to the farmer in helping him to solve his marketing problems. Individual lines, operating from fifteen to one hundred miles, are gradually forming

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into a system which, when linked up, will reach to all parts of the nation.

Let me give an illustration of how these freight-carrying automobiles are aiding the food-producers and, incidentally, returning a good profit to the owners of the vehicles: One of the companies operating out of Cleveland to Sandusky on the west and to Ashtabula on the east, taking in all way stations, has six ten-ton trucks. The first spring the company developed a large business handling hot-house vegetables. When fruits and garden vegetables began to come in these trucks transported twenty thousand crates of berries, twenty-five thousand bushels of tomatoes, and twenty thousand bushels of apples, peaches, and beans. During the grape season the same concern hauled eighty-four thousand baskets of grapes. Seven hundred baskets to the load were carried. The average haulage distance was thirty-seven miles, the charge was about seven dollars a ton, and the average load was seven tons.

The farmers are becoming educated to the advantage of the service, and it is sure to grow in popularity and usefulness. Most of the lines are not in competition with the railroads, but reach sections that have never been served except by horse and wagon. Where

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they do compete, however, it has been found that there is business enough for both. Rural motor express routes, being a war innovation, coming after the fashion of other necessities, are here to stay and do their part in feeding the world and in building a greater America.

If the beginner is so situated that he must dispose of his products through the middlemen, it would be well to make inquiries as to some reputable firm and establish a connection with it. Play fair and square at all times. Have a trade-mark and let not a barrel of apples or a crate of tomatoes or a bag of potatoes go to market that is not exactly as represented. Let the apples or potatoes in the middle of the barrel be as sound and smooth as those at either end. It won't be long before your commission man will be calling for your products in preference to some others that have to be scrutinized. When he gets your "xyz" goods he and his customers will know just where they stand. You will find pretty soon that the "xyz" produce will command prices higher than the prevailing quotations. Honesty is just as good a policy now as it ever was. The big farmers have not climbed to the top of the ladder by "cute little tricks" and sharp practice.

X

WOMEN FARMERS

AN interesting and important feature of agriculture, particularly since the outbreak of the world war in 1914, is the remarkably large number of successful women farmers to be seen in all parts of the country. Woman, as a helpmate of man, has from time immemorial played a most vital, if somewhat inconspicuous, part in agriculture, but her labors hitherto have been confined more to the home in the rearing of children and ministering to the comforts of her husband, sons, or brothers. During the war the supply of food was far below the world's needs, and the urgent demand gave a stimulus to farming such as had never been known before. Thousands of women, who up to that time had not given agriculture a thought as an occupation for themselves, patriotically donned overalls and joined the ranks of the

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tillers of the soil. There can be no doubt that their experience thus gained during our national crisis instilled a love for the land that will cause many of them to take up farming permanently as a means of livelihood. As the highest success in our occupation is based upon good management, and as women have demonstrated a capacity for sound business methods in many walks of life, there would seem to be no reason why they should not make good farmers. In fact, there already were hundreds of them conducting prosperous farms long before the war, attracting no more than passing notice. But when America entered the conflict and it became imperative that every possible ounce of energy be put into food production, women farm-workers were recruited in vast numbers, and they furnished another forcible illustration of their ability to take their places as the equal of man in our daily activities.

Two or three years ago the late George C. Horwitz, a prominent attorney of Philadelphia, purchased a large tract of land in the Everglades of Florida. He started to develop the property, when his death stopped the work. The cessation, however, was only temporary. His wife decided that she could

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carry it on, and to-day she has more than two thousand acres under cultivation. This farming on such a vast scale is not done by proxy, but under Mrs. Horwitz's personal supervision and according to her own ideas. Her foremen work directly under her leadership. Personally she directs the work in the fields, personally she plans the crops, superintends their planting, oversees the harvesting, and handles their marketing. As the largest individual developer of land in the Everglades she is leading the way in opening up one of the last "new" farming sections of the country. In two years Mrs. Horwitz has carved out of that wilderness, where six feet of the richest muck soil in the world insures enormous crops without fertilizer, between two thousand and three thousand acres of tillable land. Huge tractors are pulling plows through that black soil which had been buried for centuries under the matted jungle. Hundreds of men are on her pay-roll. Scores of farm buildings have been erected. Large acreages are fenced, hundreds of hogs are running on pasture, cattle and horses are grazing in other fields, and everywhere may be seen the results of a woman's wonderful energy.

The story of Mrs. Fannie Klinck and

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her two-hundred-acre farm near Clarksville, Iowa, should be an inspiration to every woman with a longing for the soil. She was born in a log cabin on the farm she now owns and operates herself. Mrs. Klinck has been styled "the most self-reliant woman in the world." During the war, when it became every one's duty to serve under the colors, whether at home or in the trenches abroad, Mrs. Klinck, although she could have well afforded to retire if it had been a mere question of money, did all the work with her own hands of her two-hundred-acre farm. "My hardest job was plowing the garden," she said. "To pull the walking-plow back into the corners and plow close to the apple-trees without letting the whiffle-tree bark them is not so easy as it looks, but I did it, and I never swore nor jerked the horses, either." Mrs. Klinck was the first woman in the United States to win the grand champion sweepstakes for the best individual exhibit at any state fair.

Ethel Lynberg, fifteen years of age, who lives in Salt Lake County, Utah, received the four-leaf-clover medal which is awarded the members of the boys' and girls' agricultural clubs who for four consecutive years have done successful work. In one season,

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besides attending high school, Ethel plowed sixty acres and harrowed and leveled it for wheat, alfalfa, and beets. She also assisted with the irrigation, in her father's absence, turning the water on and off alone. She canned 660 quarts of fruit and vegetables and dried many pounds. One hundred chickens grew to maturity one summer under her care.

One of the biggest hog-producing farms in Missouri is owned and operated by Miss Pearl Mitchell, who took up the work upon the death of her father. It is said that when Miss Mitchell wants a new diamond ring she raises an extra hog. In the East Mrs. Helen Ware has achieved a remarkable success with her dairy-farm in Massachusetts, and Mrs. Ehrmann, with her big olive-grove in California, has shown the men out there that a woman can be just as efficient a farmer as any man.

One of the most successful farmers in our neighborhood is a young woman who taught the rural school near her home for a few years while she was building up her poultry and bee plant. From a modest beginning she has a business that is growing rapidly, and her net profits would compare very favorably with some of the larger farms con-

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ducted by men in the community. This girl started out with no more capital than love of her work, an indomitable determination, and a level head.

Times and conditions change. Women of ambition and brains will not be content to spend their lives as household drudges. Nor is it necessary or desirable. None of their womanly charm is lost under the new order. They are none the less women in getting out and doing big things. A few years ago a man, who lived on a small farm in the valley just below our home, disappeared, leaving his wife and three children to shift for themselves. He was a worthless sort of a fellow, and, but for the thought that his family might suffer because of his absence, most of us would have been pleased that the neighborhood was rid of him. Did that brave little woman appeal to her relatives or to the county board for charity, which she might have felt amply justified in doing? Not a bit of it. She and the older boy took charge of the farm, doing all the work themselves on twenty-five acres and milking half a dozen cows. The smaller children were kept in school. They have just passed on their way home, rosy-cheeked and warmly clad, too young yet to realize the sacrifices

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that the mother is making for them or to understand the struggles she has cheerfully endured for their sake. This woman is paying off the mortgage that her husband placed on the farm. Her cows and horses are in good condition, and there is no better tilled land nor a more attractive little home in all the countryside.

The use of farm machinery is relieving the farms of the heavy toil of the old days, rendering it possible for many women to engage in agriculture who otherwise would be barred. The tractor transforms work into fun, and with the hundreds of modern appliances the farm will make an ever-increasing appeal to the woman of intelligence and ambition. What the farm needs to-day is enthusiasm. There are too many eking out an existence on the farms just as there are persons eking out an existence in the cities. These men seem to have an idea that Providence set them out here and that here they must stay. If they make both ends meet they apparently feel that their duty has been done. They have no liking for farm work; maybe some of them would not enjoy any sort of work, but they are failures on the farm because they lack the dynamic force of enthusiasm. The women are bringing that mighty power

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into agriculture, and they have set a pace for the sterner sex that is quickening with every passing year. The women have caught the true spirit of the farm. They are always pushing ahead, trying new things, and doing the old things better than any man has ever been able to do them.

XI

WORK OF THE FARM

THE only key that will unlock the treasures of the land is steady, hard, intelligent labor, and a man who is unwilling to roll up his sleeves and soil his hands had best stay away from the farm. Compared with city labor, I believe that farm work is not nearly so hard. The actual hours are longer than the average city occupation, but the absence of tension and bustle and hurry that kill so many in the cities makes the farmer's labors far less wearing and irksome. There are some men living on farms who manage to get along with a minimum of exertion. They are known as the "Peter Tumbledowns" of agriculture. Their buildings are run down, their stock is ill-kept and scrawny, and their land is poor and starving. Many years ago in the South I used to see these men lolling about in the shade in summer and dozing at the fireside in winter,

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I see a few of them even to-day in New England. If a man has no higher aspiration than simply to get enough to eat, I believe the farm offers him his greatest opportunity. Fortunately for our country, this class of men is the rare exception and not the rule. While one may live with little work in the country and go through life as ignorant and free of thought as the plow he follows—that is, when he can summon enough energy to do any plowing—I would not give the impression that agriculture is a lazy man's calling. Very few of us want to be "Peter Tumbledowns." Our occupation demands constant and varied mental exercise as well as properly applied physical toil, and whatever inequality of results we may see on every hand is in large measure the inequality of intelligent labor put into the work.

We have a "Peter Tumbledown" living a few houses away on the road to the city. They were twitting him one day about his potato crop.

"I don't see how you expect to get any potatoes out of this patch," said one of "Peter's" callers, pointing to the weeds and grass that had overgrown a few straggling potato-vines. "You admit that the planting was poorly done, don't you?"

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"Well, yes," replied "Peter," "maybe I could have done a better job with the planting."

"They haven't had any cultivation to mention, you will admit that, too, won't you?" persisted the wag.

"Oh yes, I'll admit all that," rejoined "Peter," "but don't forget that I am going to give them a devil of a digging."

Spasmodic work of that kind is as valueless on the farm as it is anywhere else. I heard of a man whose only objection to alfalfa hay was that "the darned stuff had to be cut so often," and just at a time when he was busy with his "regular farm work." He was accustomed to mowing his timothy lot once a season. When the neighbors began to grow alfalfa, that gave three or four cuttings a year, they could not get him interested at all.

In bringing this little volume to a close I want to say that I am not one of those who are alarmed at the drift cityward of the rural population. The great cities will continue to grow, but the soil will remain while man is on the earth. What the farms need is not so many more farmers, but better farmers, and some of the best farmers we have to-day are men who have come out

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from the cities. There is no question that this vast country can easily support a population many times as large as it is at present. The single state of Texas has an area as large as the German Empire as it existed before the war. Those who quit the farms for commercial and industrial occupations will leave behind the more efficient tillers of the land, and in turn the number of farmers who remain will be gradually augmented by the lesser flow back from the congested centers. The farmer of the future will produce treble or quadruple what he is producing to-day. There is no occasion for an indiscriminate scramble "back to the land." The government agencies, the agricultural colleges, and the farm journals are interesting themselves not so much in getting a large number of people from the cities to go to the farms as they are in making better farmers of the men who are already on the land. When men do come out from the city we want those who can bring intelligence and enthusiasm into their new occupation.

As agriculture grows in efficiency the farmers will make their homes more attractive, rural citizenship itself will be elevated, and there will come an automatic adjust-

WORK OF THE FARM

ment of the balance of population. It is not to be supposed that all the progress of the future will be with respect to the farming communities. The conditions of the industrial workers are constantly being improved. The great problem of capital and labor will yet be solved. In time city life will be shorn of its extreme poverty and suffering among the poor. There will be less incentive to change from one occupation to another.

In conclusion I repeat that there are marvelous opportunities to-day on the farm for the city man who has a genuine love for the soil, coupled with the physical strength and the temperament to persevere in the face of obstacles the beginner must expect at the start. I have sought to draw a rough outline of the difficulties you are likely to encounter; at the same time I have endeavored to recount briefly why we farmers are the happiest men in the world. Of course, many farmers are chronic grumblers and would not admit they were well off if they knew in their hearts they were. Others have had a pretty hard row to hoe. It is no Paradise out here. We are just plain, every-day people, working hard for a living, just as millions all over the world are do-

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ing and will continue to do until the end of time. But I feel that we are getting more out of our work than the average man in any other calling. As our soil is brought up from eighty bushels of potatoes to the acre to one hundred and two hundred and three hundred, as our scrub cattle give way to pure-breds, as we restore the fertility of our cotton and corn and wheat lands to the yields of other years when the soil was new and vigorous, there comes that sweet satisfaction in a worthy task well performed that all the wealth of Wall Street could never bring. It is a source of deep gratification, too, to know that our labor is appreciated, that it counts for something, and that as we push ahead we are carrying the whole country with us. For surely none can have failed to notice that nations have advanced in material strength, moral worth, in a healthy citizenship and all that constitutes the glory of mankind, about in ratio to their attachment to the land, and that, on the other hand, they have become weak and degraded and melted away as they have undervalued and neglected the first pursuit of man. One of the surest indications of the future prosperity and power of our great country is the marked tendency in late years to place a higher

WORK OF THE FARM

^{The}
estimate upon agricultural pursuits. Our national government and the various states are leaving no stone unturned in their efforts to see that farming keeps pace with the demands of an age blazing with the lights of science and teeming with improvements in every department of life.

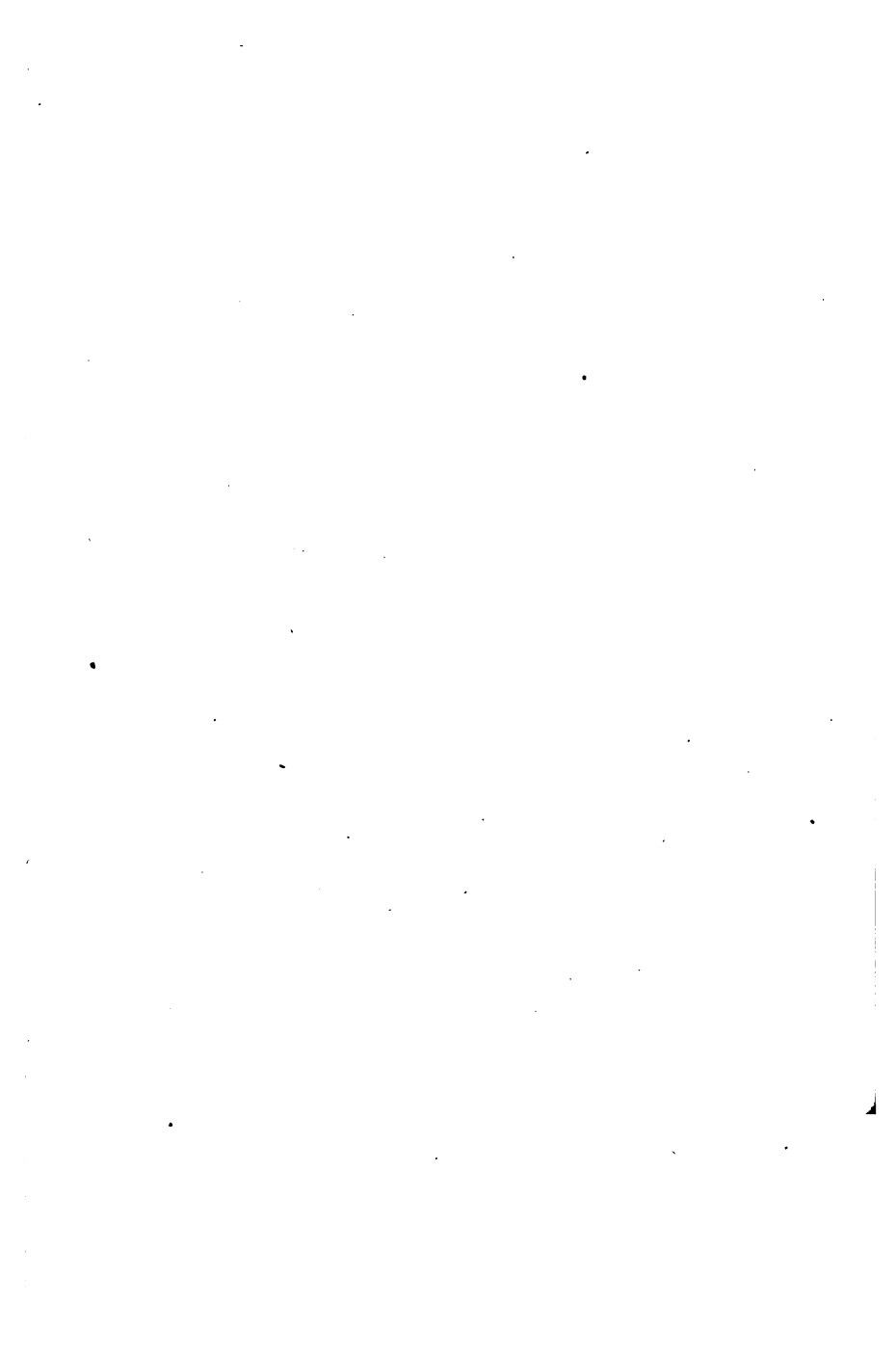
We really haven't begun to farm in this country yet. Golden opportunities are at hand for the men and women who are willing to relinquish the artificialities of the city and go out and conquer the soil.

THE END

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HONORABLE
MEMBERS OF THE
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